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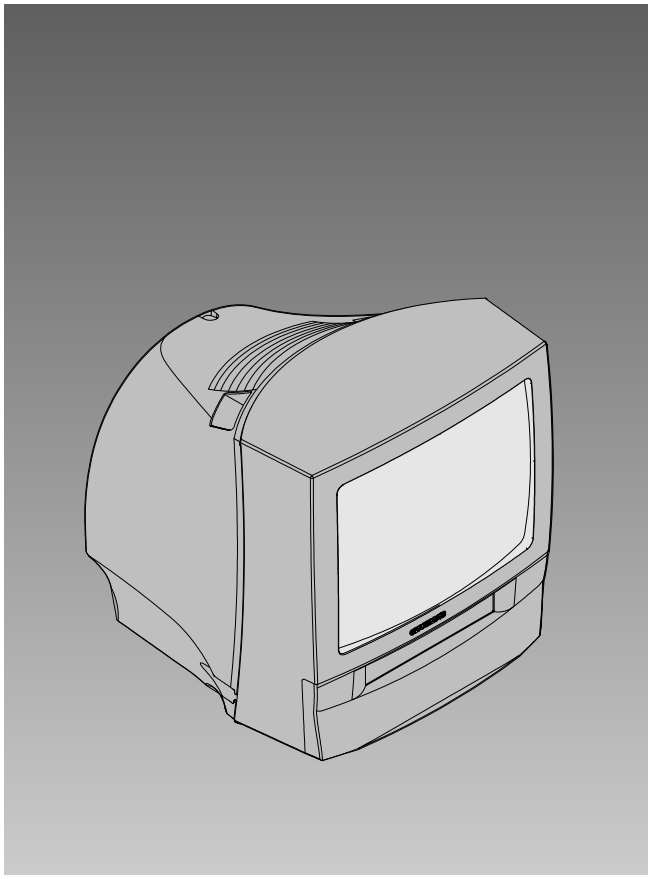
Television Video Cassette Recorder

Chassis : V15A

Model: TT20A54X/XAX TT20A54X/RCL
TT20A54X/GSU TT14A54X/XAX

SERVICE Manual

Television Video Cassette Recorder



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1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

   If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1):
   Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).

5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

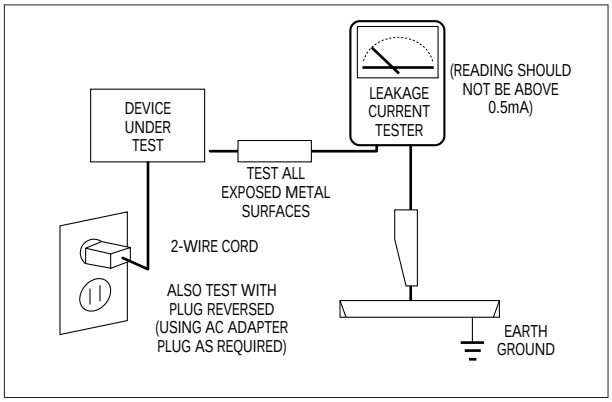

DEVICE UNDER TEST
LEAKAGE CURRENT TESTER
(READING SHOULD NOT BE ABOVE 0.5mA)
TEST ALL EXPOSED METAL SURFACES
2-WIRE CORD
ALSO TEST WITH PLUG REVERSED (USING AC ADAPTER PLUG AS REQUIRED)
EARTH GROUND

Fig. 1-1 AC Leakage Test

6. Antenna Cold Check:
   With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.

7. X-ray Limits:
   The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.

8. High Voltage Limits:
   High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be
   reconfirmed whenever they are serviced. (X-ray protection circuits also may be called "horizontal disable" or "hold-down".)

   Heed the high voltage limits. These include the X–ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

1-1 Safety Precautions (Continued)

9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

10. Design Alteration Warning:
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

11. Hot Chassis Warning:
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.

    To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.

12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.

13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.

14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.

15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.

16. Picture Tube Implosion Warning:
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.

17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.

18. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.

    Components that are critical for safety are indicated in the circuit diagram by shading, (⚠) or (⚠).
    Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications.
    A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning 1 : First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning 2 : An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.

2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.

3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.

4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.

5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).

6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.

7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

2. Immediately before handling any semicon ductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)

3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.

4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.

5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.

6. Use only an anti-static solder removal device. Many solder removal devices are not rated as "anti-static"; these can accumulate sufficient electrical charge to damage ESDs.

7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.

8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.

9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

2. Specifications

Format	VHS Standard
Recording System	Rotary, azimuth two-head or four-head helical scanning system Luminance : FM azimuth recording Color signal : converted subcarrier phase shift recording
Television System	NTSC-type color signal EIA standard (525 lines, 60 fields)
Audio Track	1 track
Tape Width	12.7 mm (1/2 inch)
Record Speed SP SLP	 33.35 mm/s (1.31 in./s) 11.12 mm/s (0.43 in./s)
Record/Playback Time	480 min. with T-160 used in SLP mode
FF/Rew Time	Less than 100 sec. with T-120
Heads	Video : 2 rotary heads, 4 rotary head Audio/Control : 1 stationary head Erase : 1 full track erase 1 audio track erase
VIDEO	
Input	VIDEO IN jack (RCA) 1.0Vp-p, 75 ohm unbalanced
Signal-to-Noise Ratio	Better than 35dB
Horizontal Resolution	Color/Monochrome: more than 220 lines
AUDIO	
Input	AUDIO IN jack (RCA) -8dBm,50kohm unbalanced
Horizontal Resolution	Color/Monochrome : more than 220 lines
Frequency Response	
SP : - 6dB SLP : - 6dB	100Hz - 10KHz 100Hz - 5KHz
TV Tuner	VHF input : Ch.2 - Ch.13, Cable channels 4A, A~W, W+1~W+84, A-5~A-1 75 ohm unbalanced UHF input : Ch.14-Ch.69 VHF,UHF one input 75 ohm unbalanced
Power Requirement	120V AC, 60Hz (USA/CANADA), 100V ~ 240V (LATIN)
Power Consumption	13 (14) Inch : Approx. 65 watts when on 19 (20) Inch : Approx. 80 watts when on
Operating Temperature	41°F - 104°F (5°C - 40°C)
Operating Humidity	10%-75%

Equipment specifications are subject to change without notice.

3. Alignments and Adjustments (VCR)

3-1 Mechanical Adjustments

3-1-1 Tape Transport Adjustment

Note : The tape transport system was adjusted precisely in the factory, any adjustments is unnecessary except for:

- ✥ Noise on the screen.
- ✥ Tape damage.
- ✥ Parts replacement in the tape transport system.

3-1-1(A) PARTS LOCATIONS

The lower flange height of tape guide is used as the reference height for the transport adjustment. To maintain the height of the tape guide, do not apply excessive force onto the main base.

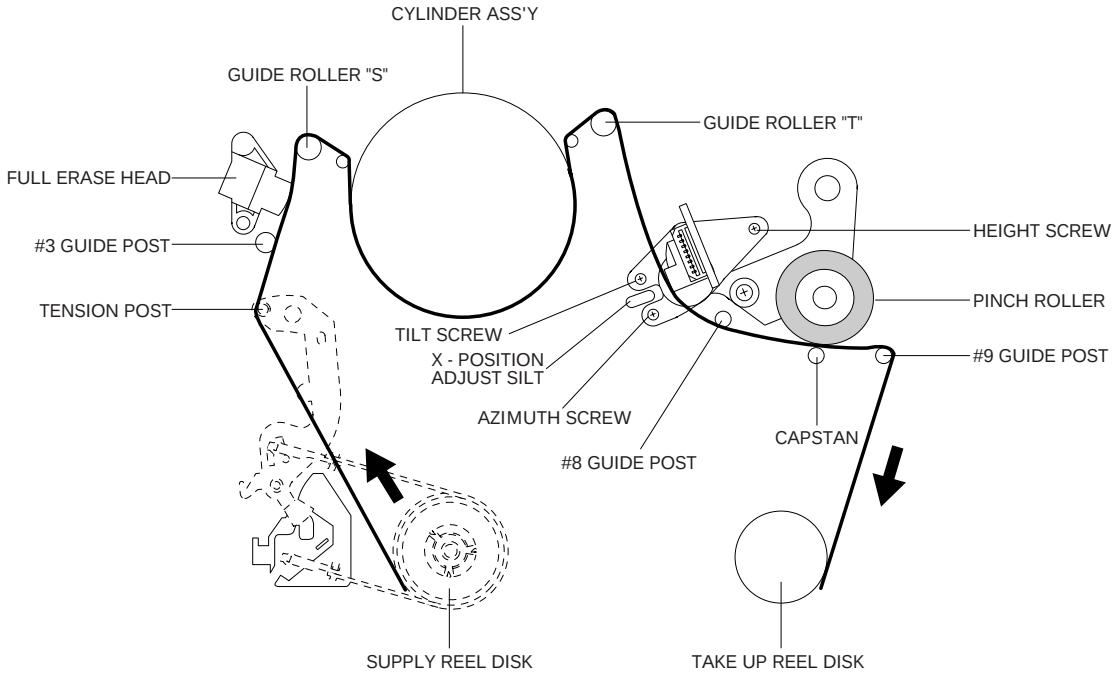


Fig. 3-1 Parts Locations of transport system

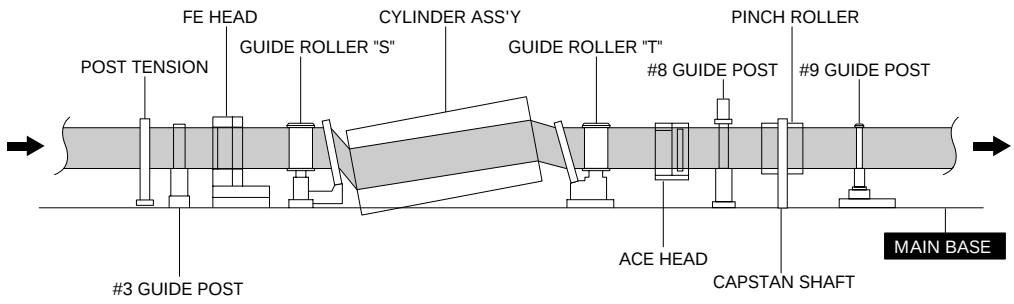


Fig. 3-2 Vertical section of tape transport system

3-2 Adjustments

3-2-1 Preadjustment

1. When parts are replaced, the tape ran sport system may be changed. When many different parts are replaced, refer to the procedures for the tape transport system.

   To begin run a T-120 tape and make sure that excessive tape wrinkle does not occur at each of the tape guides.

2. If tape wrinkle occurs at the S, T-guide rollers, turn the S, T-guide rollers until the tape wrinkle disappears.

3. If tape wrinkle still occurs at the tape guide, adjust the tilt of A/C head.

4. A/C head adjustment locations

Test Points : JM112-CTL (control waveform)
JM113-H'D SW (head switching sync)
JM114-EnV (envelope waveform)
JM119-A.OUT (audio output)
Test Tape : Color bar (1 KHz)
Lion pattern(7 KHz)

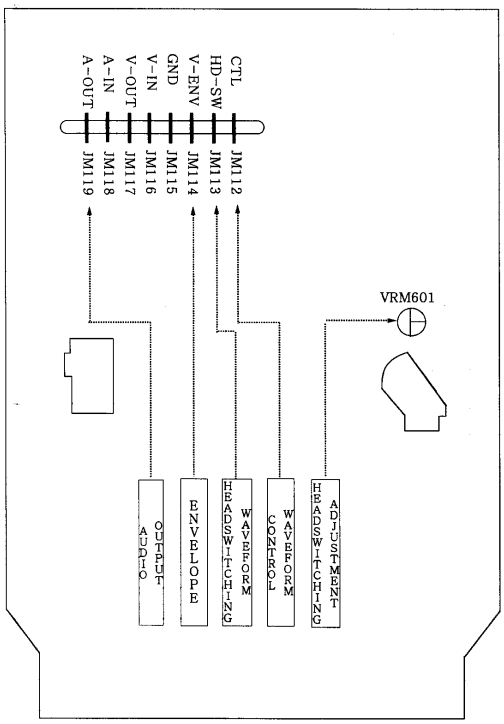


Fig. 3-3

3-2-2 Adjustments

3-2-2(A) A/C HEAD HEIGHT ADJUSTMENT

1. Run the alignment tape (Color bar) in the playback mode.

2. Observe surface of the audio head using a dental mirror.

3. Turn screw (C) clockwise or counterclockwise until the gap of lower tape edge and the lower edge of the control head is about 0.25mm (Refer to Fig. 3-4 and 3-5).

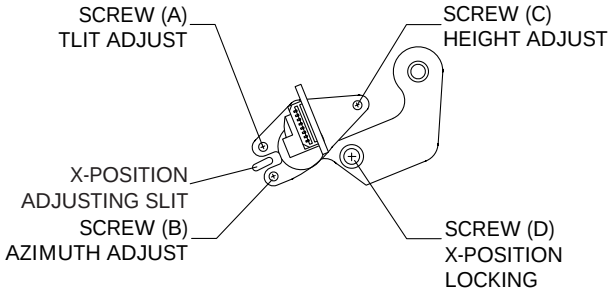


Fig. 3-4 Location of A/C Head Adjustment Screw

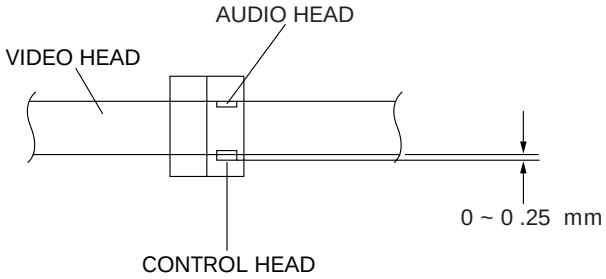


Fig. 3-5 A/C Head Height Adjustment

3-2-2 (B) A/C HEAD TILT ADJUSTMENT

1. Playback a blank tape and observe the position of the tape at the lower flange of tape guide.
2. Confirm that there is no curl or wrinkle at the lower flange of tape guide as shown in (Fig. 3-6).
3. If a curl or wrinkle of the tape occurs, slightly turn the screw (A) tilt adjust on the ACE head ass'y.
4. Reconfirm the ACE head height.

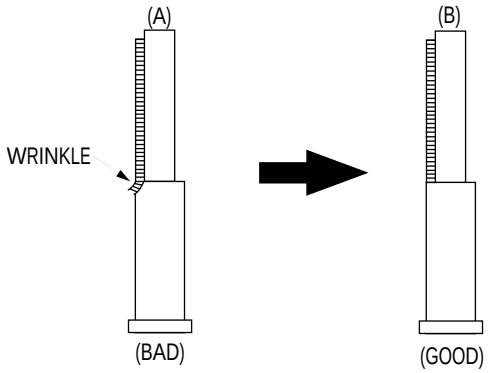


Fig. 3-6 Tape Guide Check

3-2-2(C) AUDIO AZIMUTH ADJUSTMENT

1. Load alignment tape (Mono Scope) and play back a 7KHz signal.
2. Connect Ch1 scope probe to JM119(A-OUT).
3. Adjust A/C head azimuth adjustment screw B for maximum audio output level (see Fig. 3-4).

3-2-2(D) A/C HEAD POSITION (X-POINT) ADJUSTMENT

1. Load alignment tape (Mono Scope) and play back a 7KHz signal (SP Mode).
2. Connect Ch1 scope probe to JM119 (A-out), Ch2 scope probe to JM113-H'D SW Adjust sync to Channel 1.
3. 4HD Model : Set the control pulse to 6.5 msec using the Fine tracking buttons +/- on the remote control (see Fig. 3-8, 3-9).

   2HD Model : 2.5msec (see Fig. 3-8, 3-9).
4. Connect Ch1 scope probe to JM114-ENV.
5. Insert the adjusting driver into the X-position adjusting gear and adjust the driver for maximum envelope waveform.

   Note :
   Do not adjust the X-point using excessive force. After turning the X-point adjusting screw (D) counterclockwise a little, perform the adjustment and then tighten the screw (See Fig. 3-4).

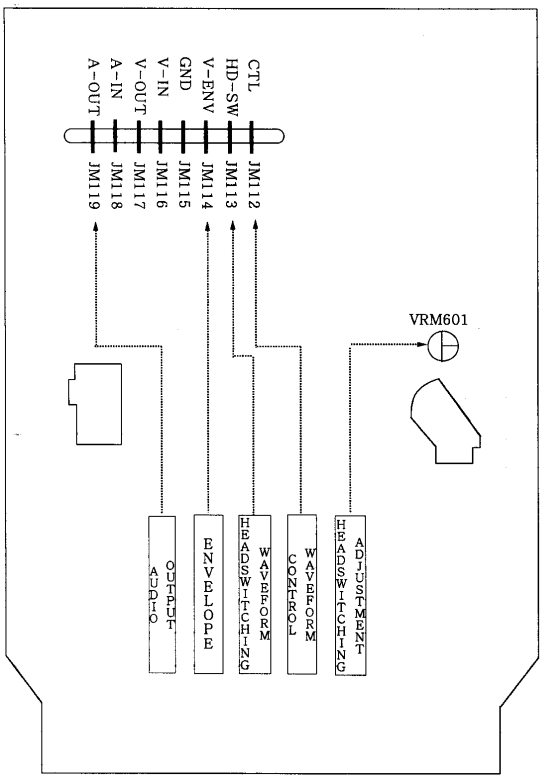


Fig. 3-7 Test Point Position (Main PCB : Parts)

SCOPE SETTINGS

♦ Setting of Scope ♦
- Volt/div. ; CH-1 = 0.1V
  CH-2 = 0.2V

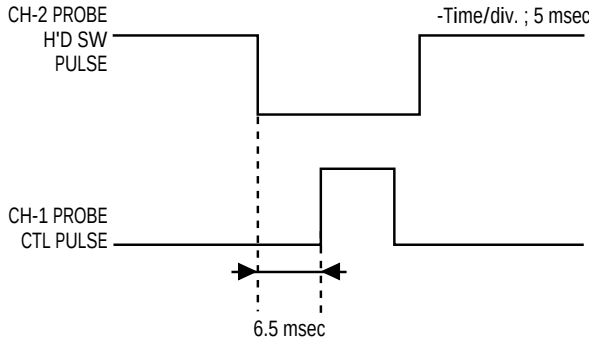


Fig. 3-8 (A) Tracking Preset Adjustment (4HD)

♦ Setting of Scope ♦
- Volt/div. ; CH-1 = 0.1V
  CH-2 = 0.2V

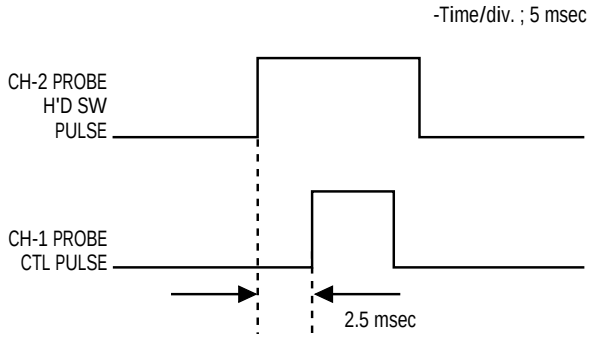


Fig. 3-8 (B) Tracking Preset Adjustment (2HD)

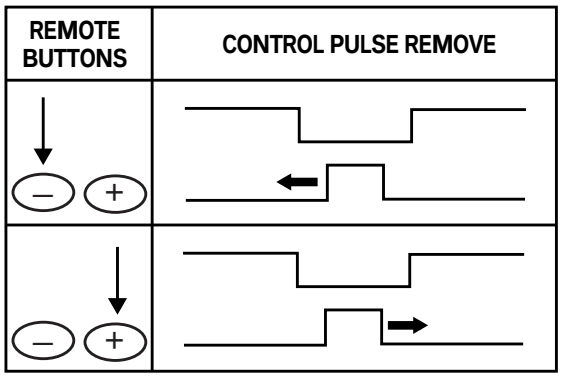


Fig. 3-9 Control Pulse Adjustment

3-2-2(E) LINEARITY ADJUSTMENT
(GUIDE ROLLER S,T ADJUSTMENT)

Test Points : JM113-H'D SW (head switching sync)
JM114-EnV (envelope waveform)

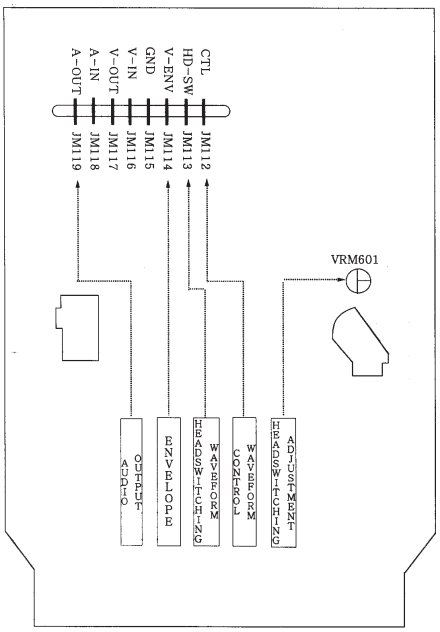


Fig. 3-10 Test Point Position (Main PCB : Parts)

1. Play back the Mono Scope alignment tape (SP Mode).

2. Observe the video envelope signal on the oscilloscope after taking sync with the video switching pulse.

3. Make sure that the video envelope meets the specifications of Fig. 3-11 (especially for minimum values).

Note :
a = Maximum output of the video RF envelope
b = Minimum output of the video RF envelope at the entrance side
c = Minimum output of the video RF envelope at the center point
d = Maximum output of the video RF envelope at the exit side

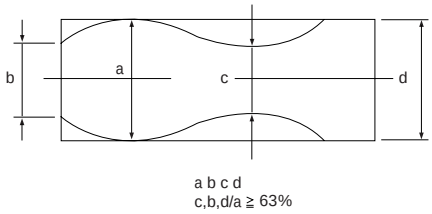


Fig. 3-11 Envelope Waveform Adjustment

4. If Fig. 3-12 A does not meet the specification, adjust the S-guide roller up or down.

5. If Fig. 3-12 B does no meet the specification, adjust the T-guide roller up or down.

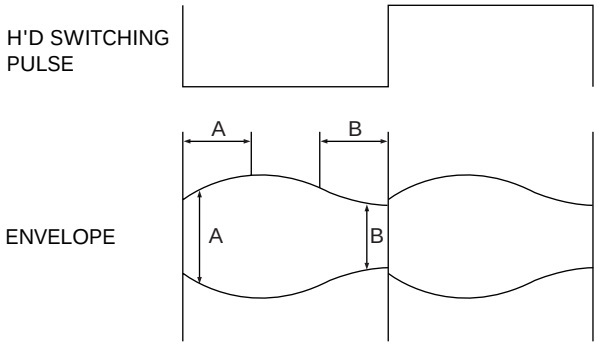


Fig. 3-12 Adjustment Points

6. Slightly loosen the set screw at the lower part of S, T-guide rollers using a hex wrench (diameter : 0.9mm), so that the guide rollers can be adjusted with reasonable tightness (Fig. 3-13).

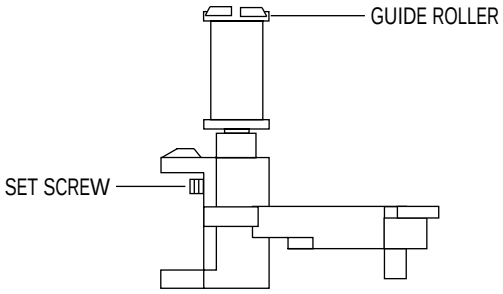


Fig. 3-13

7. Play back the Mono Scope alignment tape (SP Mode).

8. Connect CH1 to JM114 (ENV), and CH2 to JM113 (H'D) for taking sync (located on the same PCB).

9. Turn the guide roller head with a flat head screw driver (▬) to obtain a flat video RF envelope as shown in Fig. 3-14.

10. After completing the adjustments, tighten the set screw.

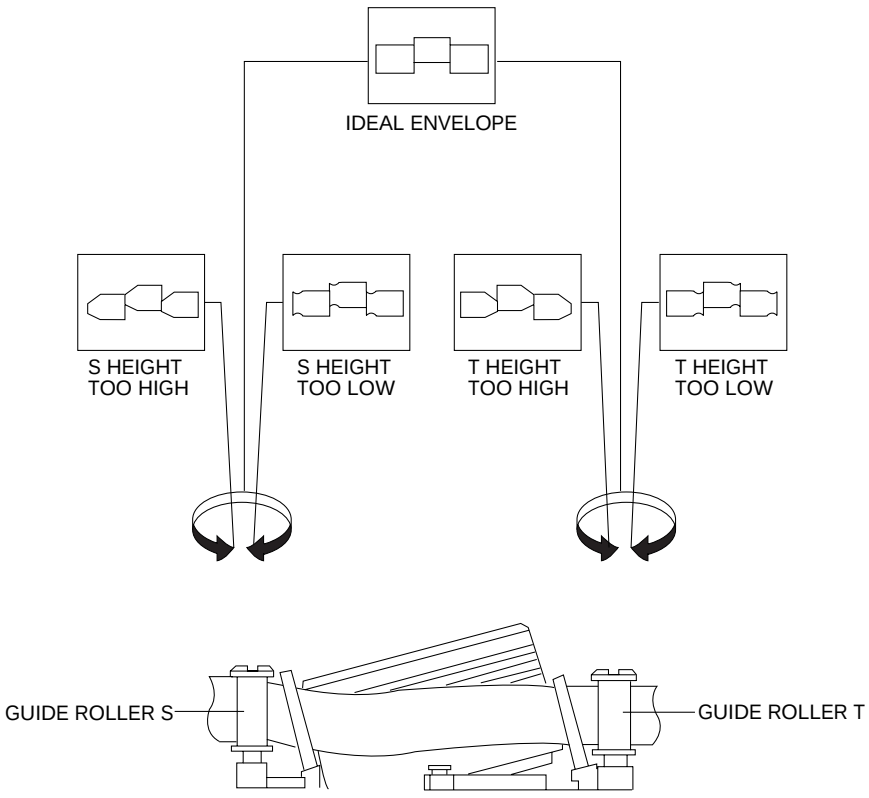


Fig. 3-14 S, T-Guide Roller Height Adjustment

3-2-3 Check Switch over from RPS to Playback Mode

1. Check the transition from RPS to playback mode using a pre-recorded SP tape.
   Make sure that the leading edge of envelope comes to an appropriate steady state within 3 seconds as shown in Fig. 3-15.

2. If the leading edge of envelope waveform does not meet the specification within 3 seconds, make sure that there is no gap between the S-roller lower flange and the tape. If there is a gap, readjust the S-guide roller.

3 Change operation from RPS to Play back Mode, and make sure that the leading edge

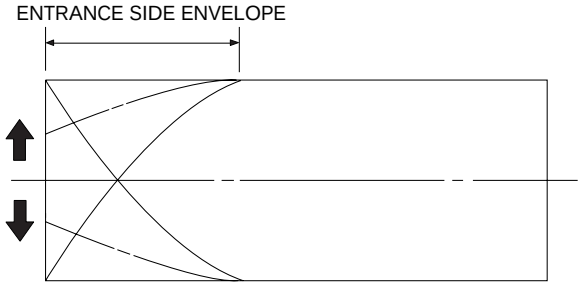


Fig. 3-15 Video envelope rise (when transiting from RPS to Playback mode)

3-2-4 Envelope Check

1. Make recordings on T-120 and T-160 tapes, and make sure that the playback output envelope meets the specification show in Fig. 3-16.

2. Play back a self recorded tape (use a T-120). The video envelope should meet the specification shown in Fig. 3-16.
   In SLP Mode, (A) should be the same as (B). If the head gap is wide, check the cylinder

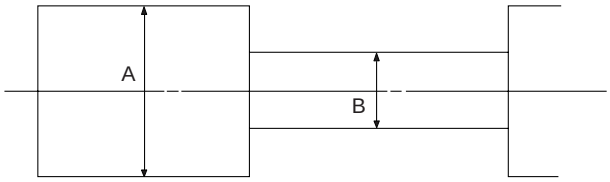


Fig. 3-16 Envelope Output and Output Level Difference Playback mode)

3-2-5 Tape Wrinkle Check

1. Run the T-180 tape in playback, FPS, RPS and the Pause Modes, and observe the tape wrinkle at each guide.

2. If excessive tape wrinkle is observed during the above modes, do the following adjustments :

   If tape wrinkle occurs at S, T-guide rollers, do a linearity adjustment. If tape wrinkle exists at the tape guide flange, do an A/C head assembly adjustment.

3-3 Reel Torque Adjustments

1. The rotation of the capstan motor causes the Holder Clutch Ass'y to rotate through the Belt Pulley.

2. The spring wrap PLAY/REV of holder clutch ass'y drives the disk reel S, T through gear idle by rotation of gear center ass'y.

3. Brake is operated by slider cam at FF/REW mode.

4. Transportation of accurate driving force is done by gears (Gear Center Ass'y).

Note : If the spec. does not meet the followings specifications, replace the holder clutch ass'y and then recheck.

MODE	TORQUE g/cm		GAUGE
PB	NTSC	82.5 ± 27.5	Cassette Torquemeter
	PAL	79 ± 27	
RPS	145 ± 30		Cassette Torquemeter

3-4 Location Adjustment and Confirmation of Tension Post

1. Remove the holder cassette ass'y and then push the lever FL Arm-R to the direction of loading.

2. Push the lever tension drive ❶ in the direction of arrow. (See Fig. 3-17)

3. Turn the gear worm wheel ❷ clockwise so that "Timing Point" of the slider FL drive ❸ and gear FL cam ❹ can be aligned (See Fig. 3-18).

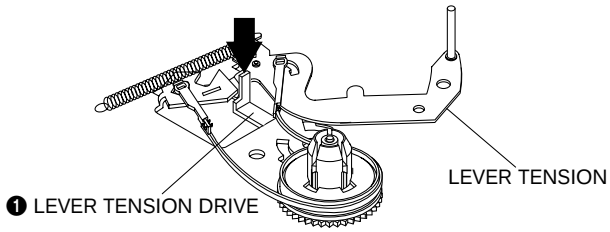


Fig. 3-17

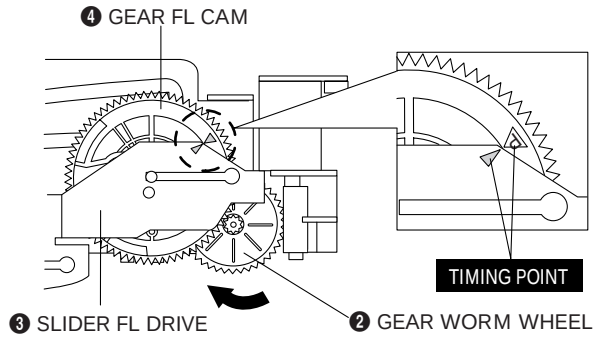


Fig. 3-18

4. As rotating Disk S Reel ❶ clockwise and the region of adjusting in the Main Base (in shape of slit) clockwise or counterclockwise after inserting screw driver in the slit on Main Base. Adjust the left end edge of Lever Tension Ass'y ❸ to 1.3+1.5/-0.5mm from the location of mark in the Main Base.

5. As rotating Disk S Reel ❶, double-check the location of the left end edge of Lever Tension Ass'y and the quantity of crossing from mark on Main Base. (+1.0/-0.5mm)

   Counterclockwise : Torque UP
   Clockwise : Torque DOWN

   Back Tension should be 56 ± 15g.cm at inspecting it with Back Tension Meter.

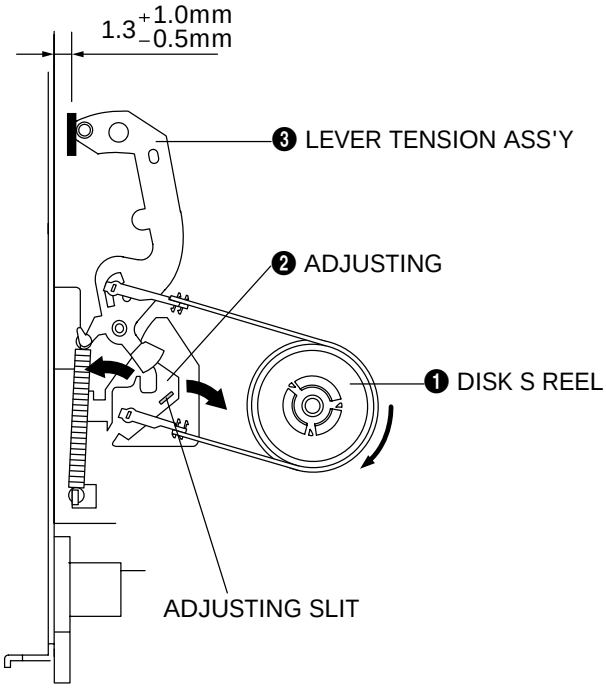


Fig. 3-19 Tension Pole and Back Tension Adjustment

Note :

1. Mark on Main Base is located in about 1.3mm from inside of bending line.

2. Be careful not to deform the region of adjusting on Main Base up and down at adjusting.

3-5 Circuit (SERVO) Adjustment

3-5-1 Adjust the switching point.

1. Play back the SP standard tape.
2. Connect the oscilloscope CH1 to EYM03 (H'D) and CH2 to EYM11 (V.OUT)
3. Set the oscilloscope sync to CH1, and adjust VRM601 for 6.5H ± 0.5H waveform as shown in the figure.

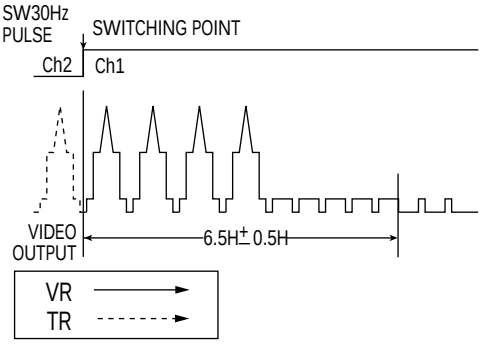


Fig. 3-20

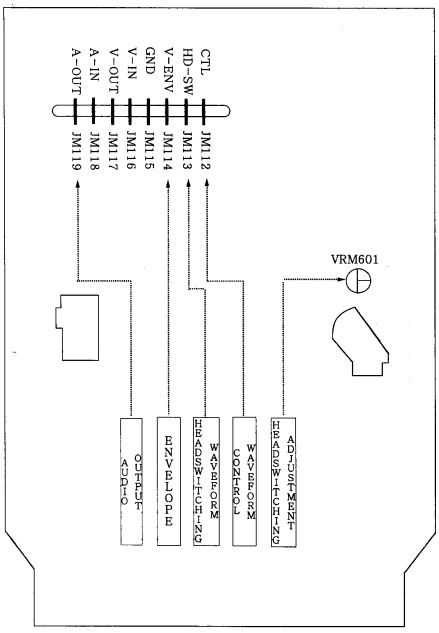
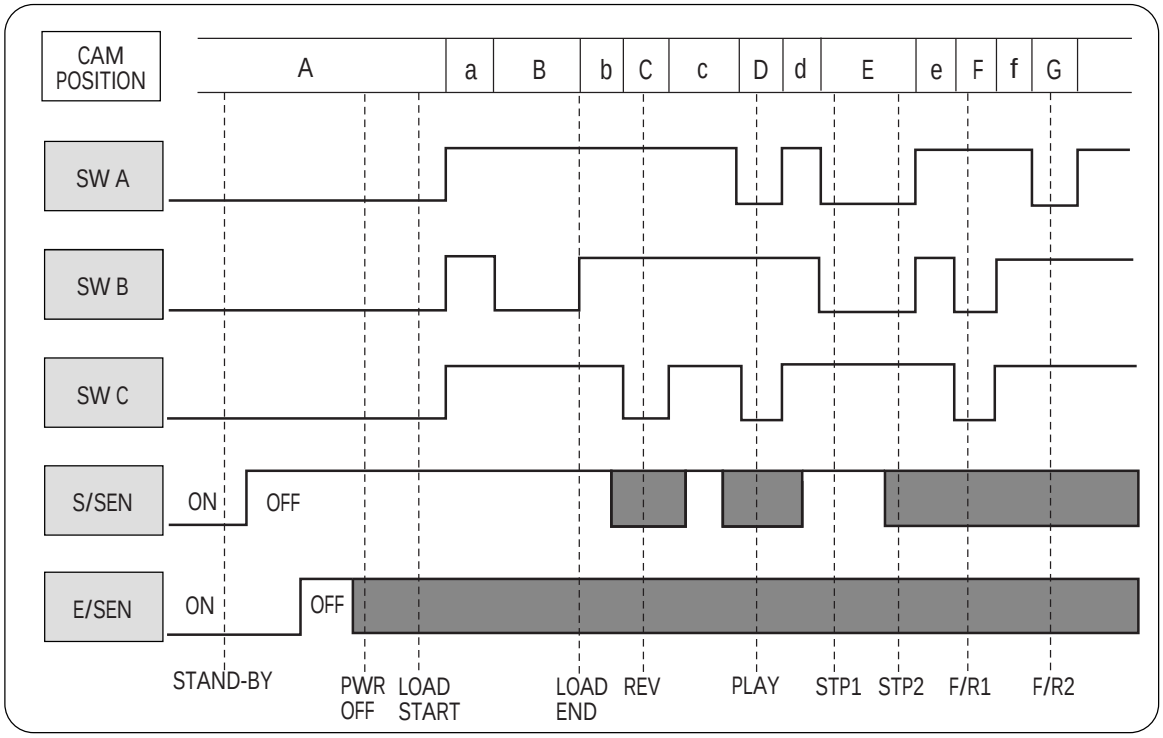


Fig. 3-21

5. Timing Chart

5-1 Program S/W Timing Chart



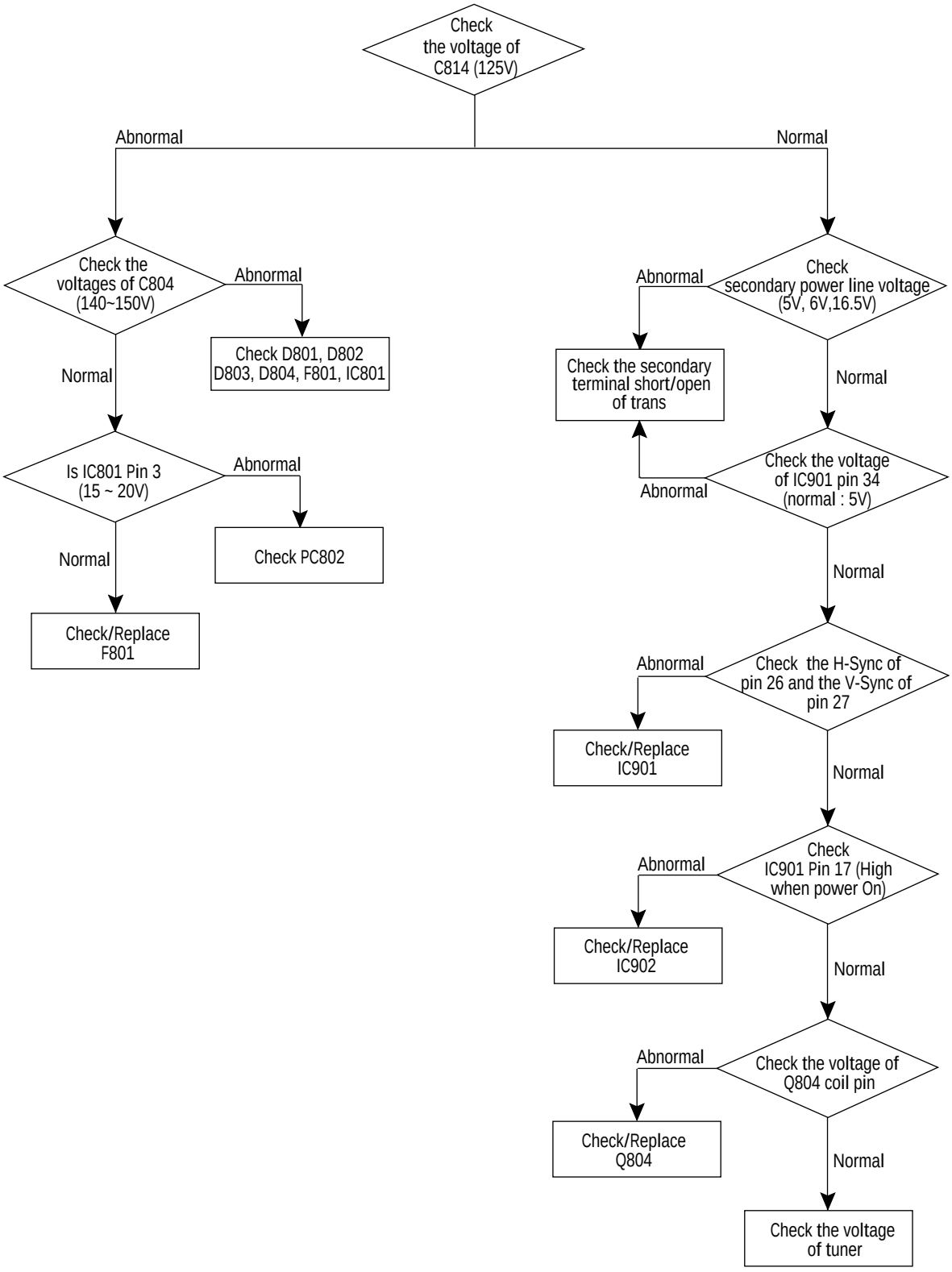
START/END SENSOR : ON - "L", OFF - "H"

: DON'T CARE

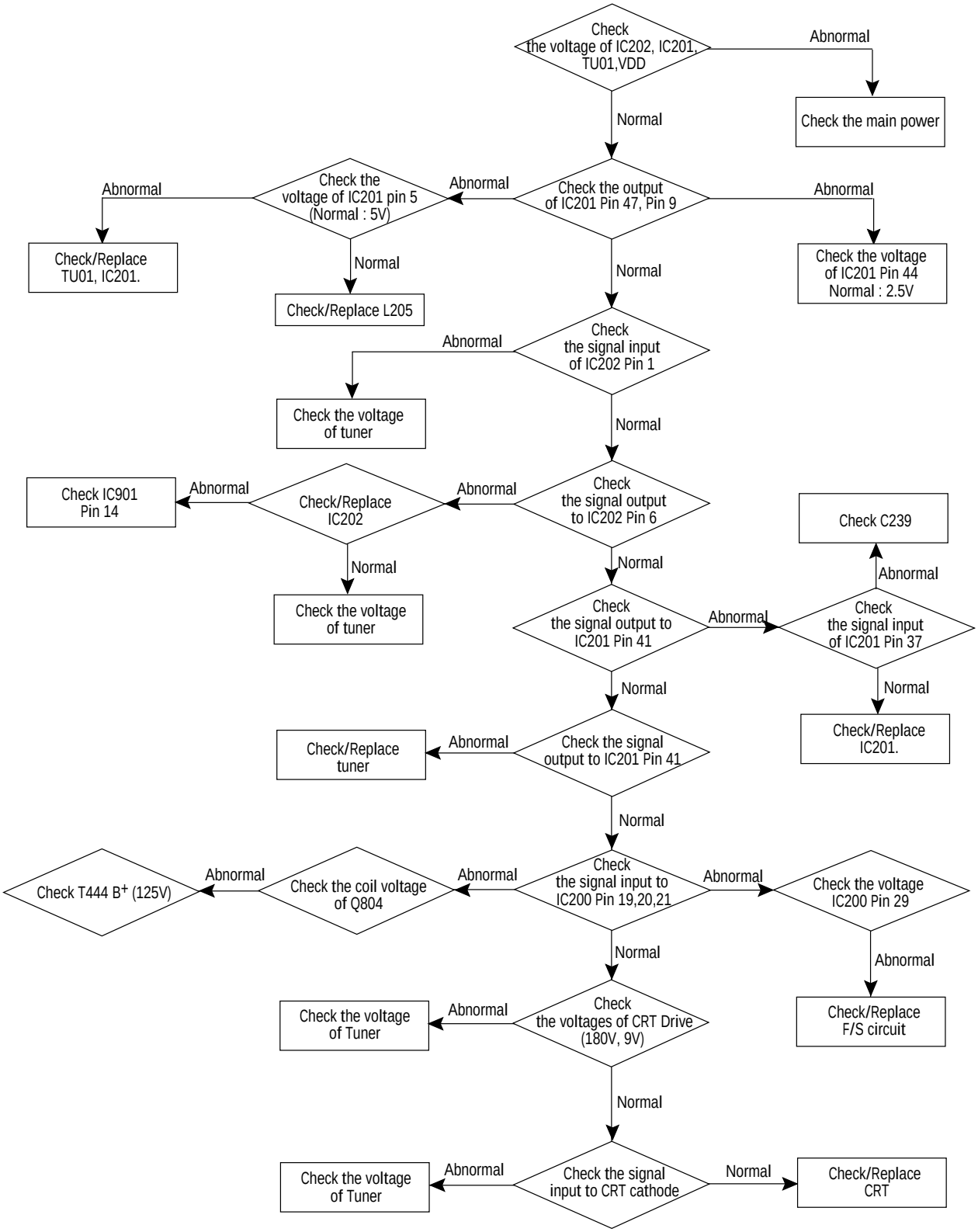
POSITION	CAM S/W			START SEN	ACTION MODE
	A	B	C		
STAND BY	0	0	0	0	Eject
POWER OFF	0	0	0	1	Unload Power Off
LOADING START	0	0	0	1	(Tape loading start point)
LOADING END	1	0 →1	1	1	(Tape loading end point)
REV	1	1	0	X	Reverse Picture Search, Reverse SLOW
PLAY	0	1	0	X	Play, Rec, F-PS, Still, SLOW, F-ADV
STOP1	0	0	1	1	Stop (Play position 5 Min, over)
STOP2	0	0	1	X	(MAIN Break ON MODE)
FF/REV1	1	0	0	X	High speed Rew, Low speed FF
FF/REV2	0	1	1	X	High speed FF, Low speed REW

6. Troubleshooting

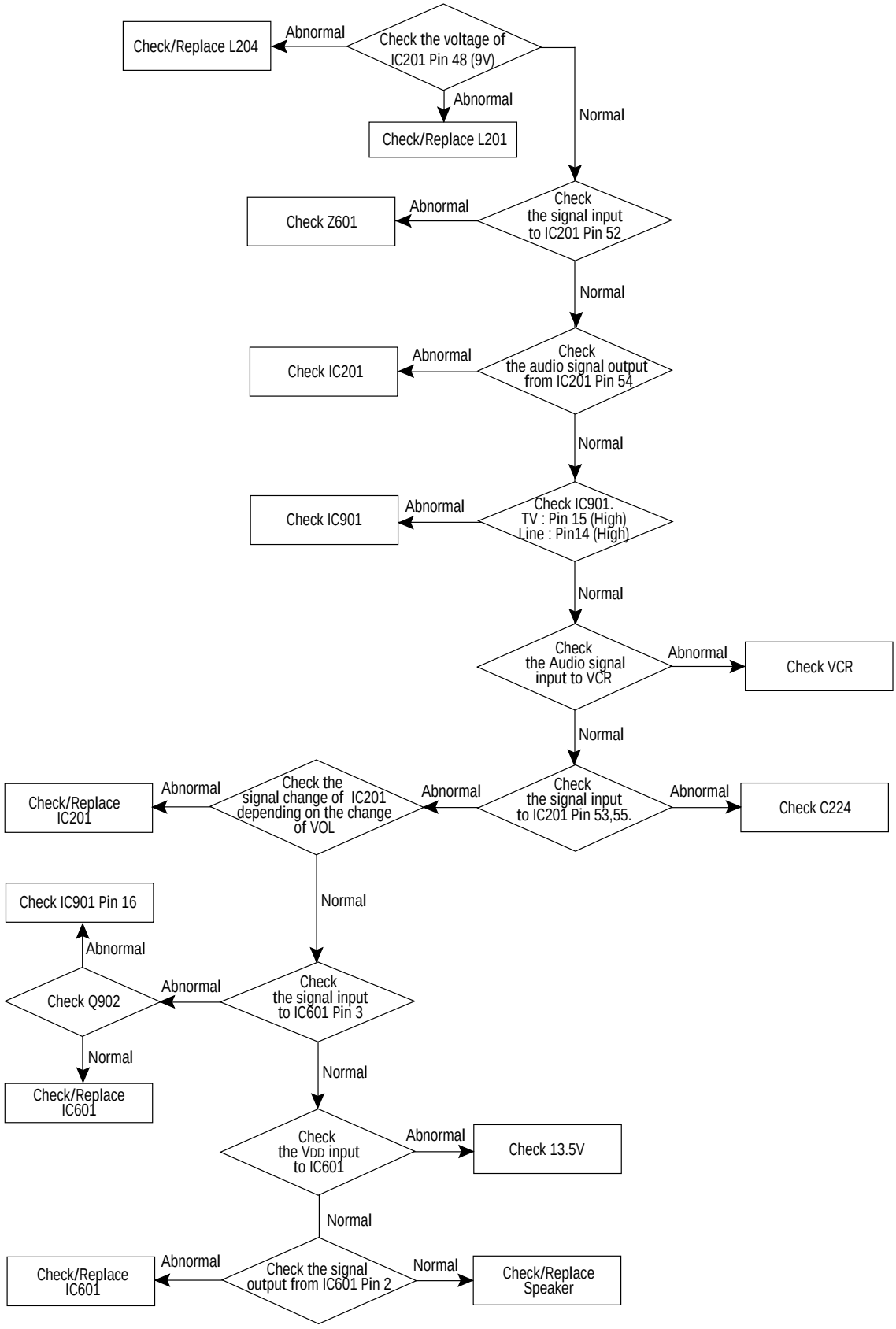
6-1 No Power (No Raster, No Sound, Power Led Off)



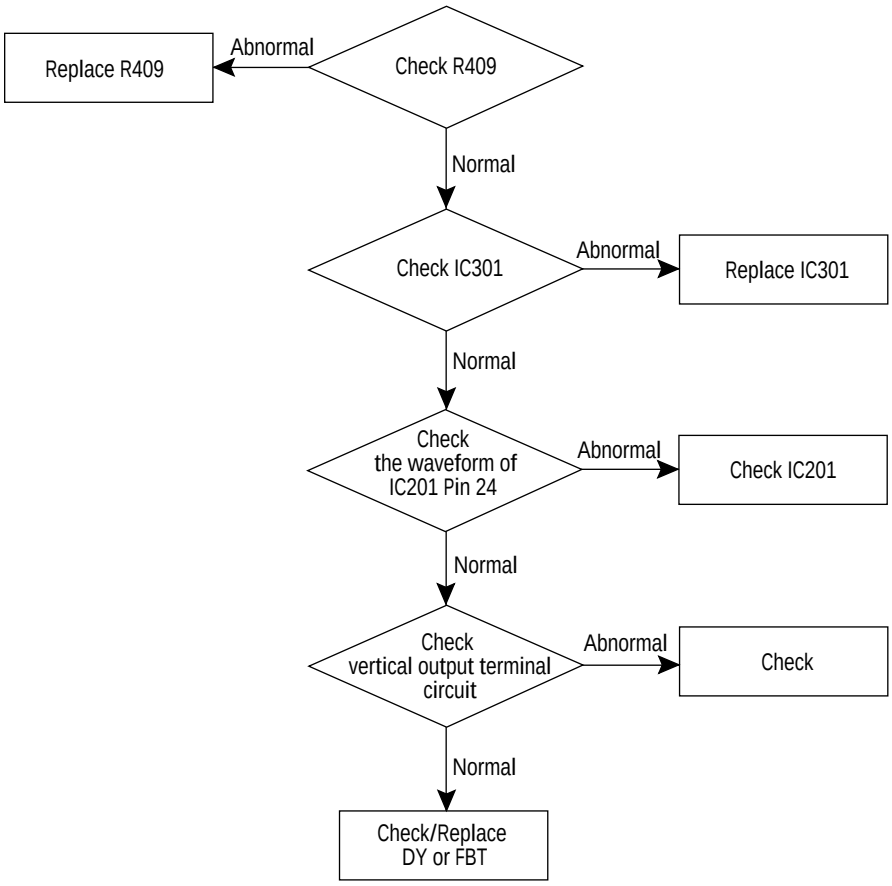
6-2 No Picture or Raster



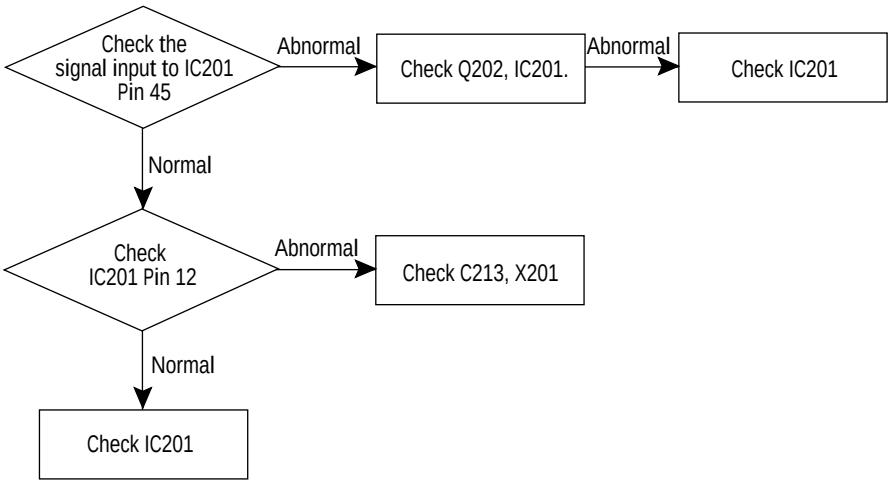
6-3 No Sound (Picture OK)



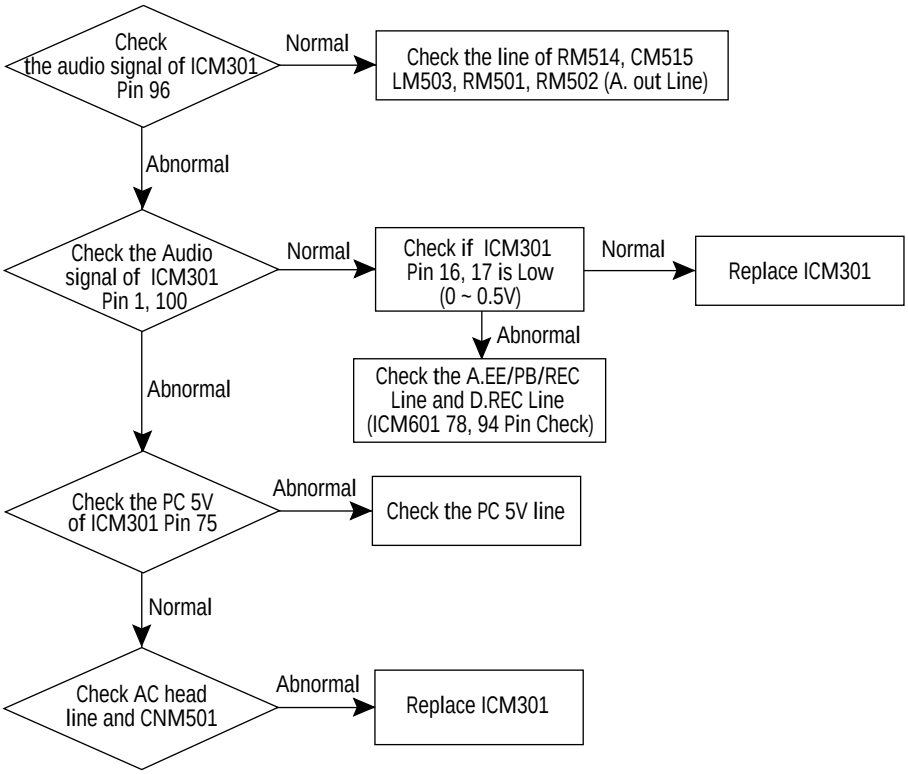
6-4 No Vert Scan



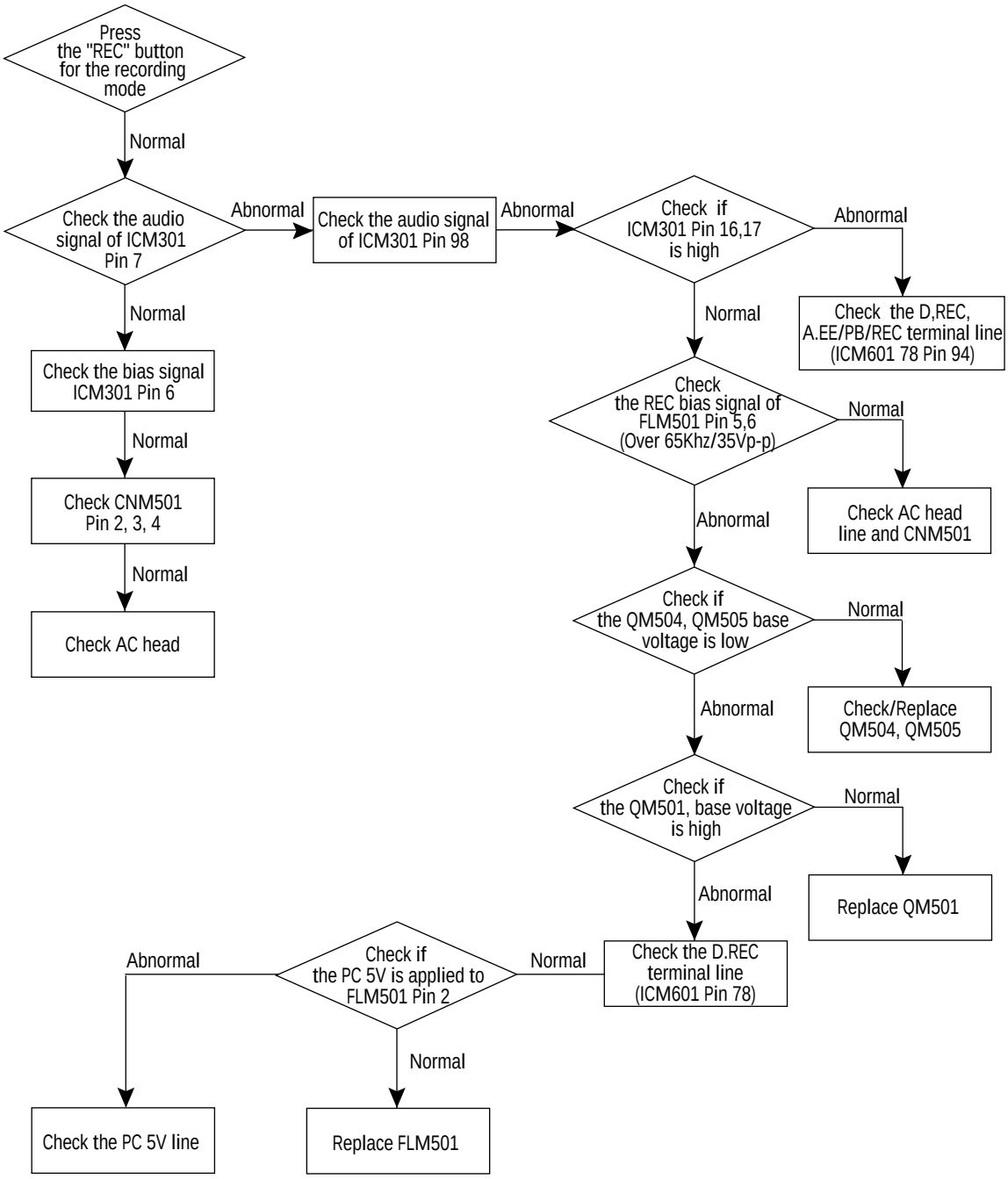
6-5 No Color



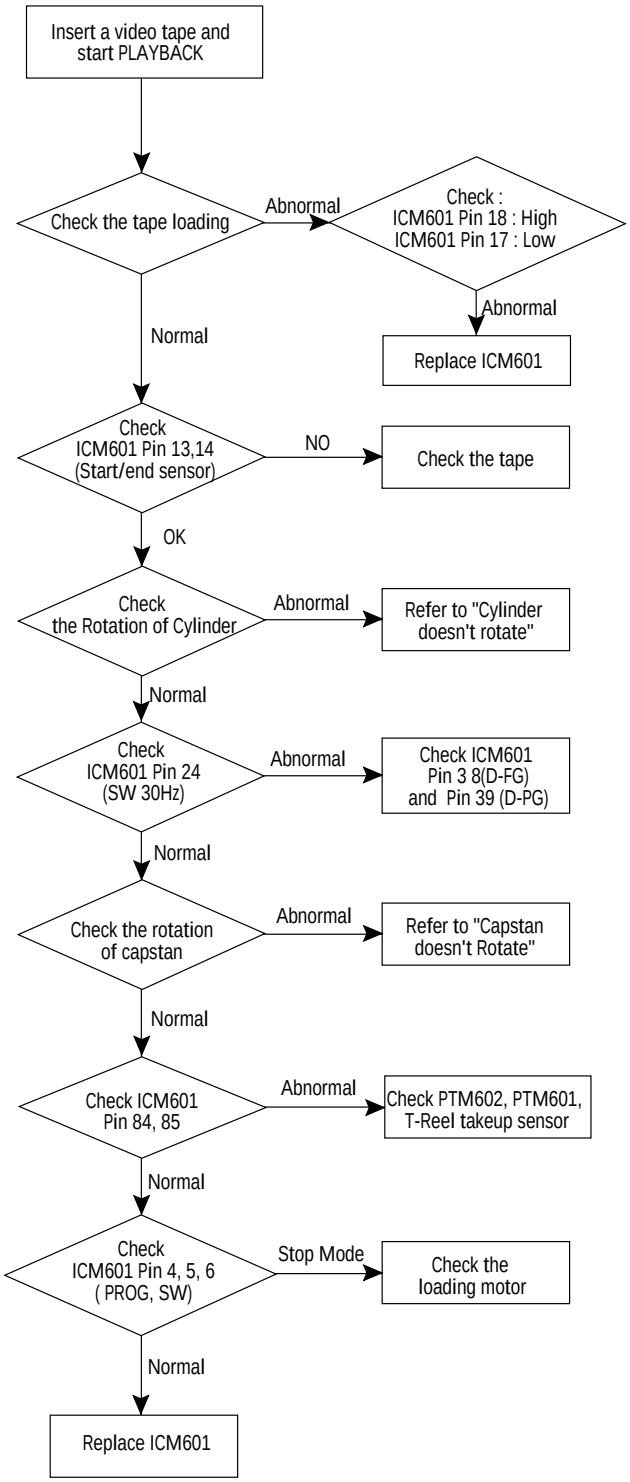
6-6 No Audio During Playback



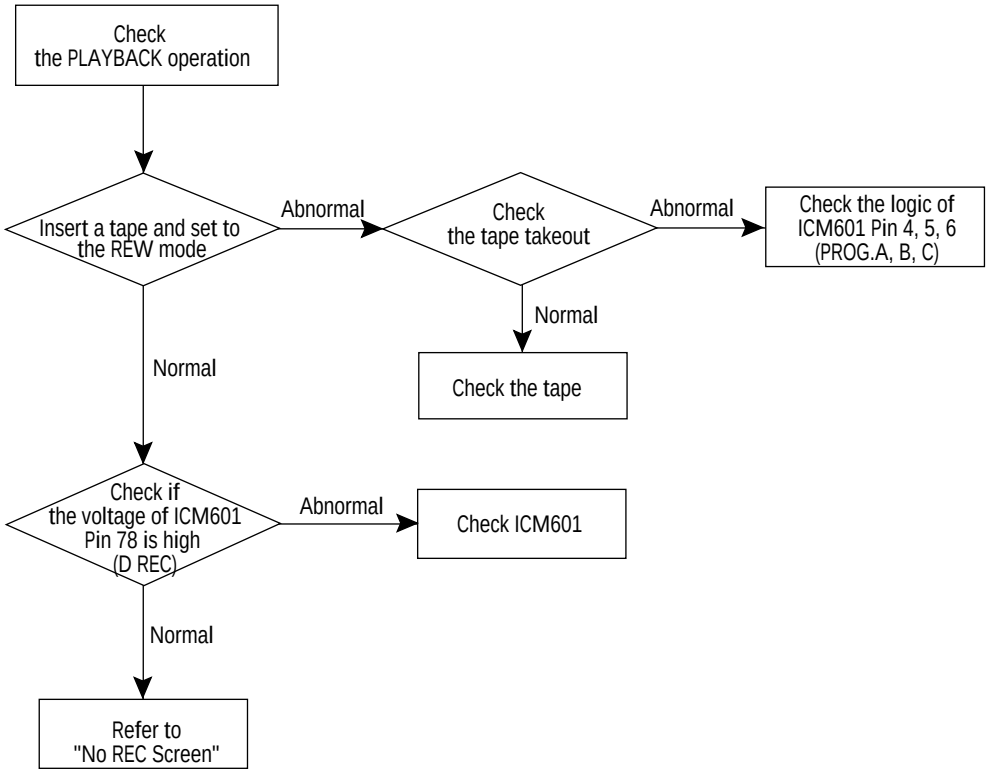
6-7 No Audio During Record


Press the "REC" button for the recording mode
Normal
Check the audio signal of ICM301 Pin 7
Abnormal
Check the audio signal of ICM301 Pin 98
Abnormal
Check if ICM301 Pin 16,17 is high
Abnormal
Check the D,REC, A.EE/PB/REC terminal line (ICM601 78 Pin 94)
Normal
Check the bias signal ICM301 Pin 6
Normal
Check CNM501 Pin 2, 3, 4
Normal
Check AC head
Check the REC bias signal of FLM501 Pin 5,6 (Over 65Khz/35Vp-p)
Normal
Check AC head line and CNM501
Abnormal
Check if the QM504, QM505 base voltage is low
Normal
Check/Replace QM504, QM505
Abnormal
Check if the QM501, base voltage is high
Normal
Replace QM501
Abnormal
Check the D.REC terminal line (ICM601 Pin 78)
Normal
Check if the PC 5V is applied to FLM501 Pin 2
Abnormal
Check the PC 5V line
Normal
Replace FLM501

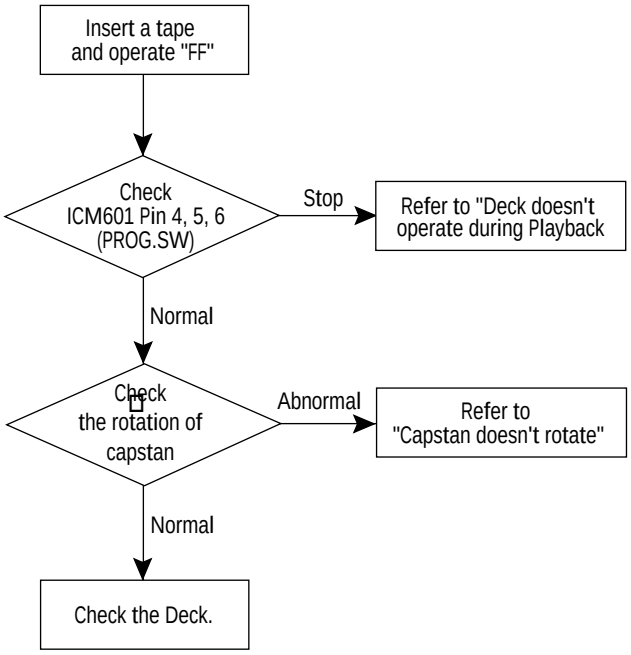
6-8 No Playback



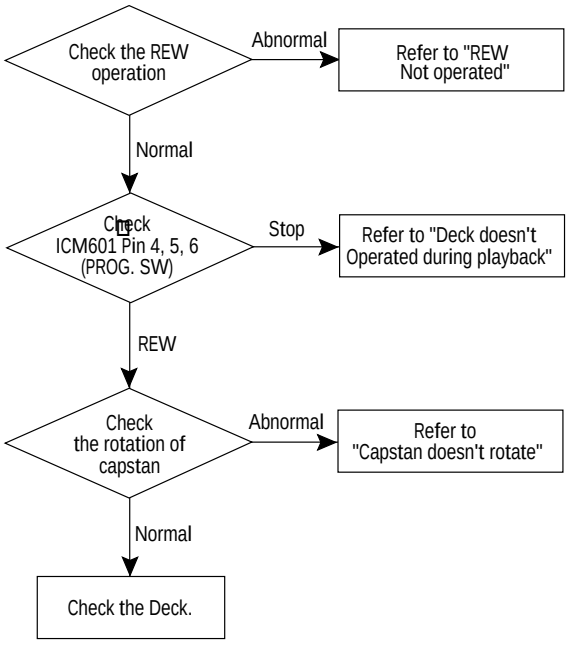
6-9 REC Doesn't Operate



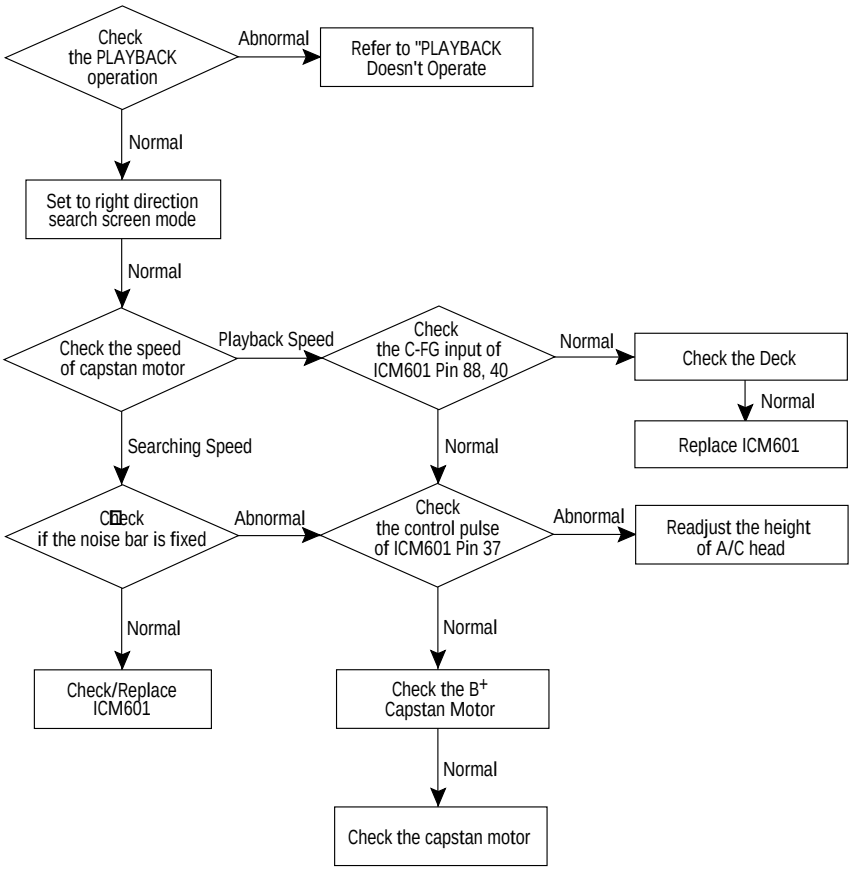
6-10 "FF" Doesn't Operate



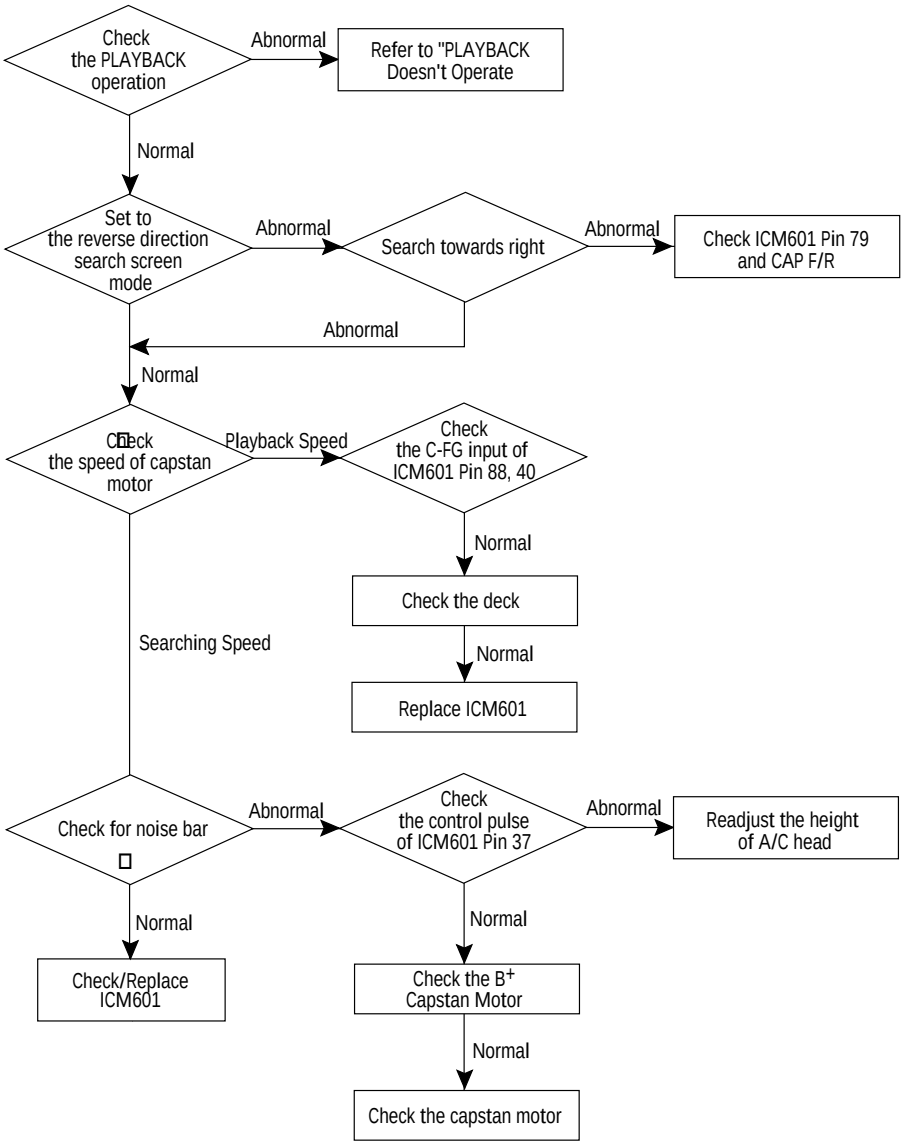
6-11 “REW” Doesn’t Operate



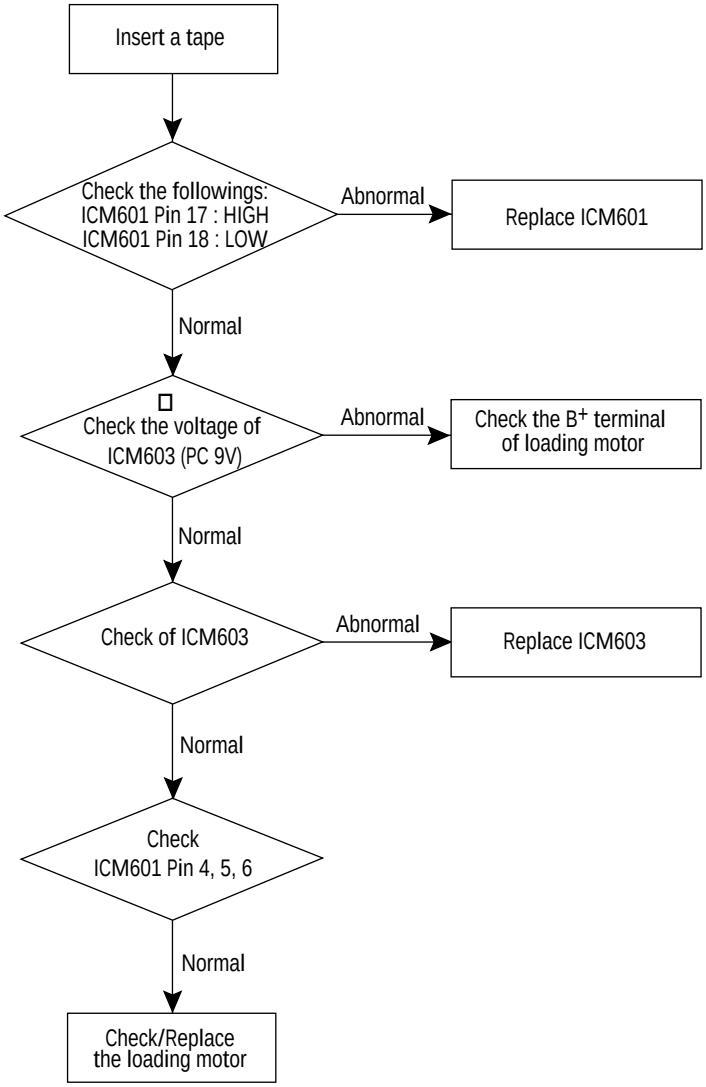
6-12 “Forward Direction Search Screen” Doesn’t Operate



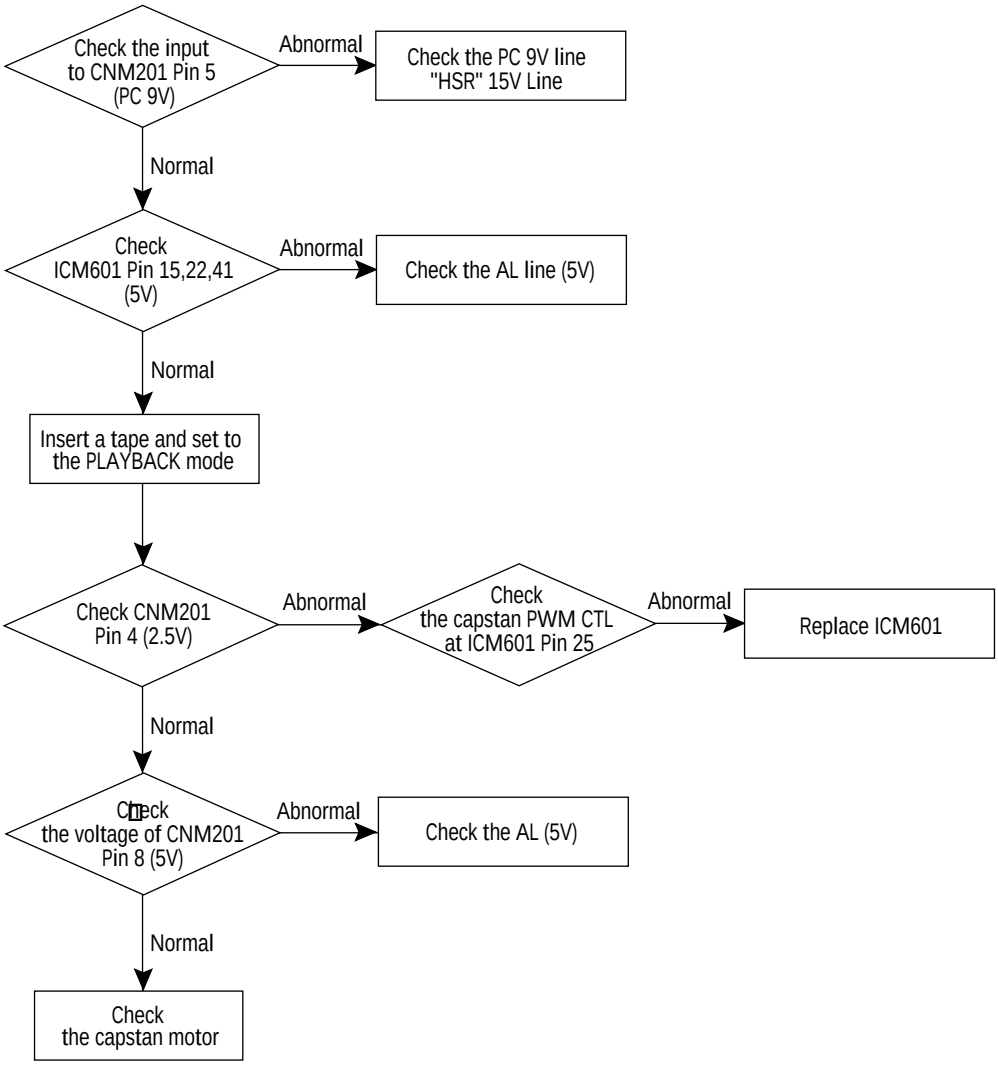
6-13 “ Reverse Direction Search Screen “ Doesn’t Operate



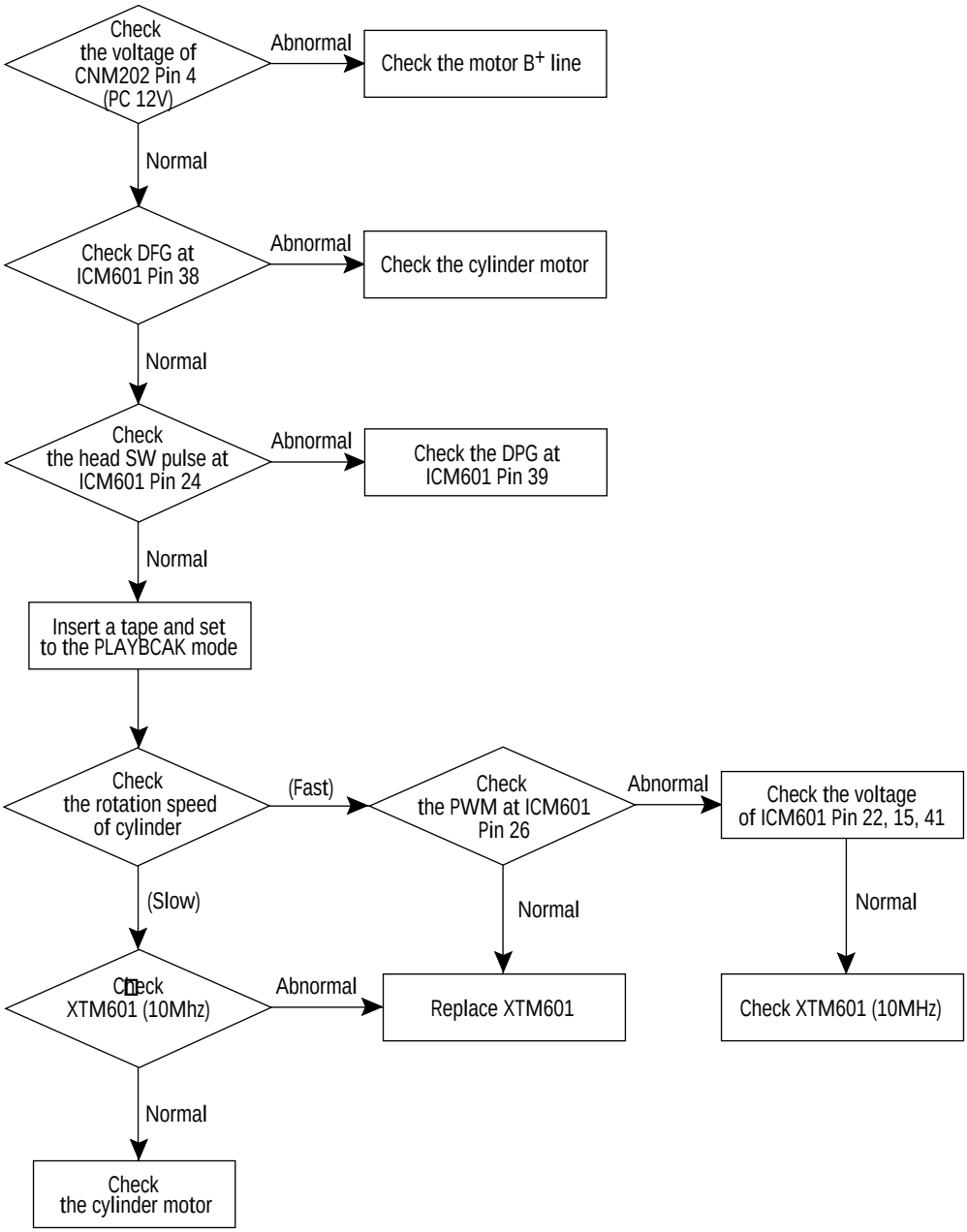
6-14 Tape Doesn't Load



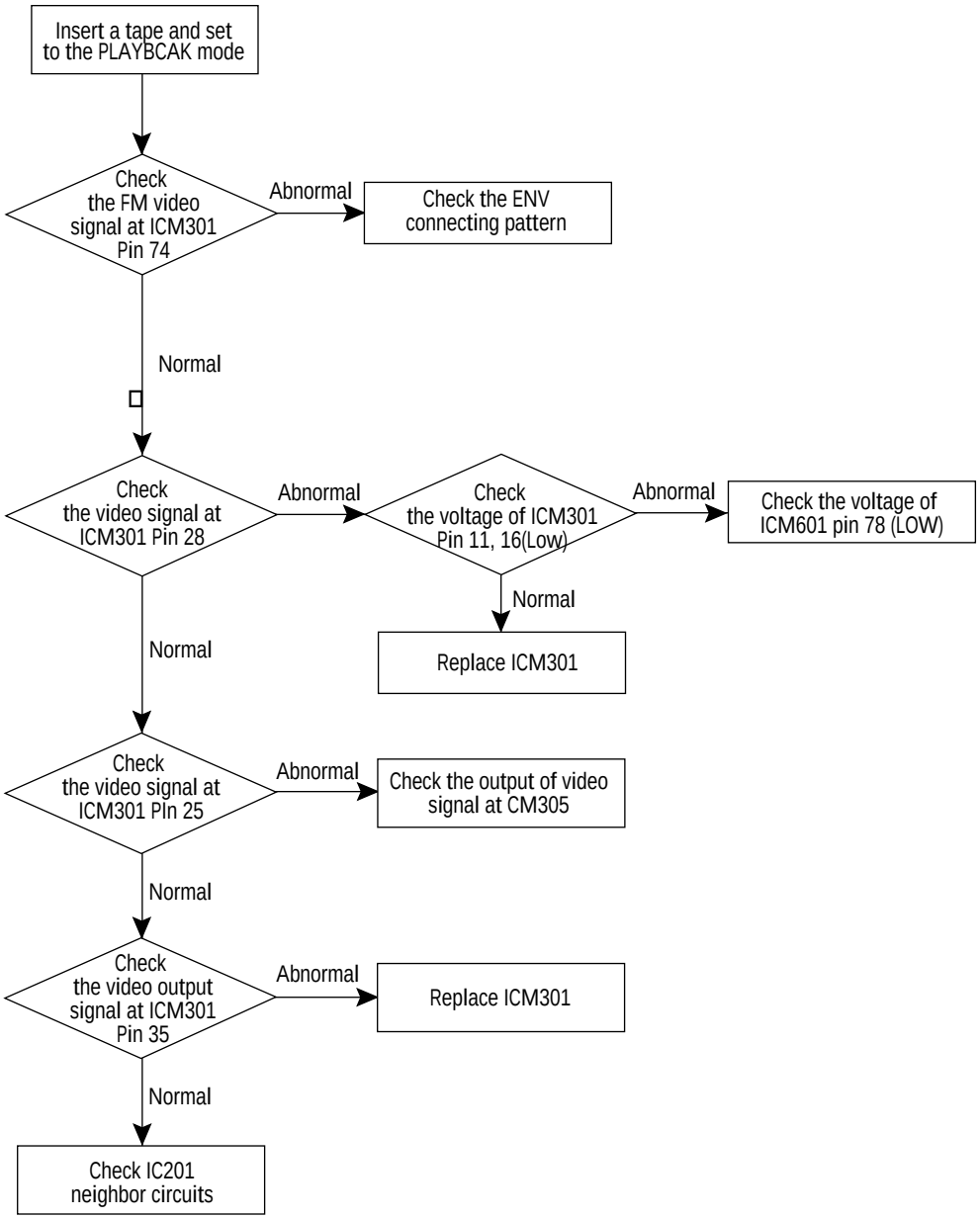
6-15 Capstan Doesn't Rotate



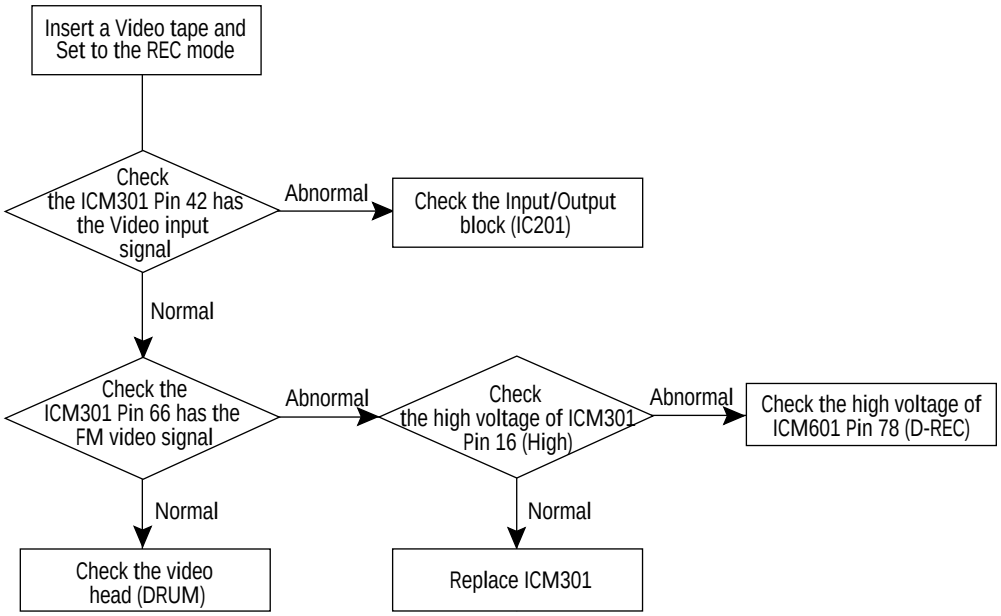
6-16 Cylinder Doesn't Rotate



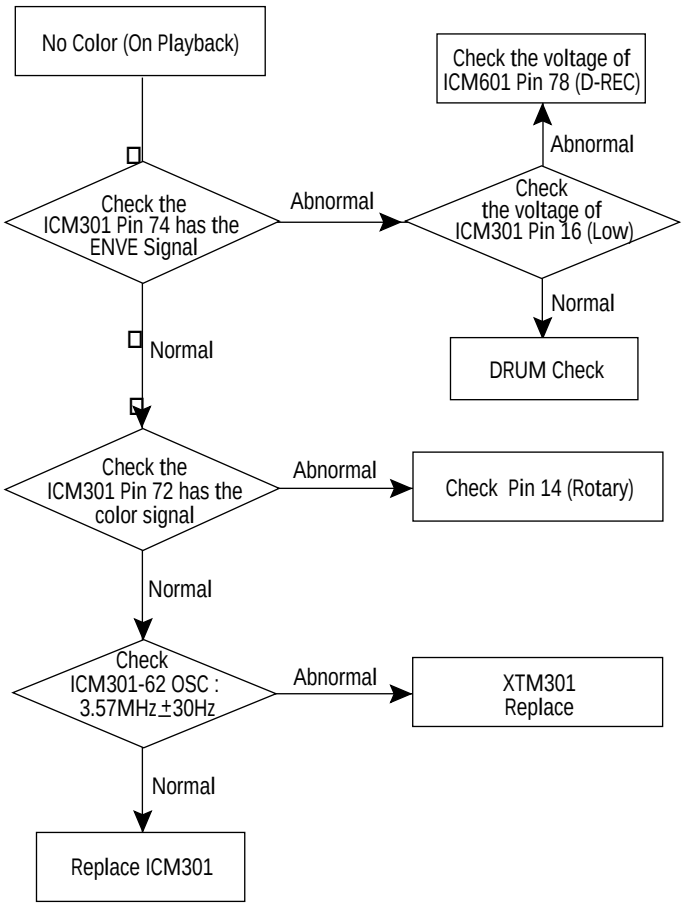
6-17 No Picture During Playback


Insert a tape and set to the PLAYBCAK mode
Check the FM video signal at ICM301 Pin 74
Abnormal
Check the ENV connecting pattern
Normal
Check the video signal at ICM301 Pin 28
Abnormal
Check the voltage of ICM301 Pin 11, 16(Low)
Abnormal
Check the voltage of ICM601 pin 78 (LOW)
Normal
Replace ICM301
Normal
Check the video signal at ICM301 Pln 25
Abnormal
Check the output of video signal at CM305
Normal
Check the video output signal at ICM301 Pin 35
Abnormal
Replace ICM301
Normal
Check IC201 neighbor circuits

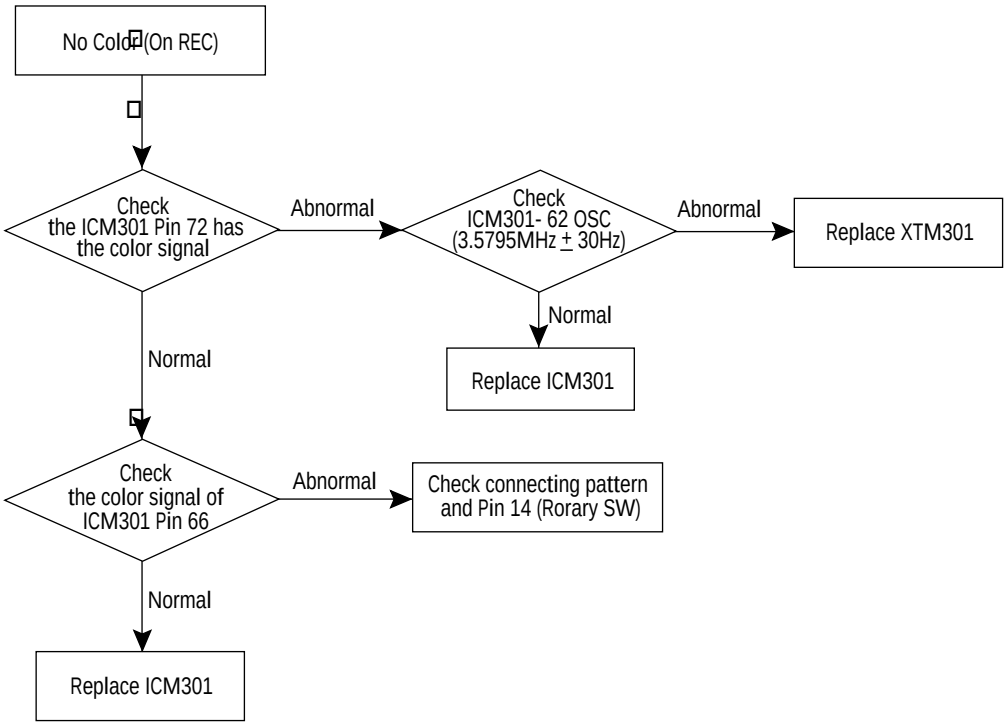
6-18 No Picture During Record


Insert a Video tape and Set to the REC mode
Check the ICM301 Pin 42 has the Video input signal
Abnormal
Check the Input/Output block (IC201)
Normal
Check the ICM301 Pin 66 has the FM video signal
Abnormal
Check the high voltage of ICM301 Pin 16 (High)
Abnormal
Check the high voltage of ICM601 Pin 78 (D-REC)
Normal
Normal
Check the video head (DRUM)
Replace ICM301

6-19 No Color During Playback

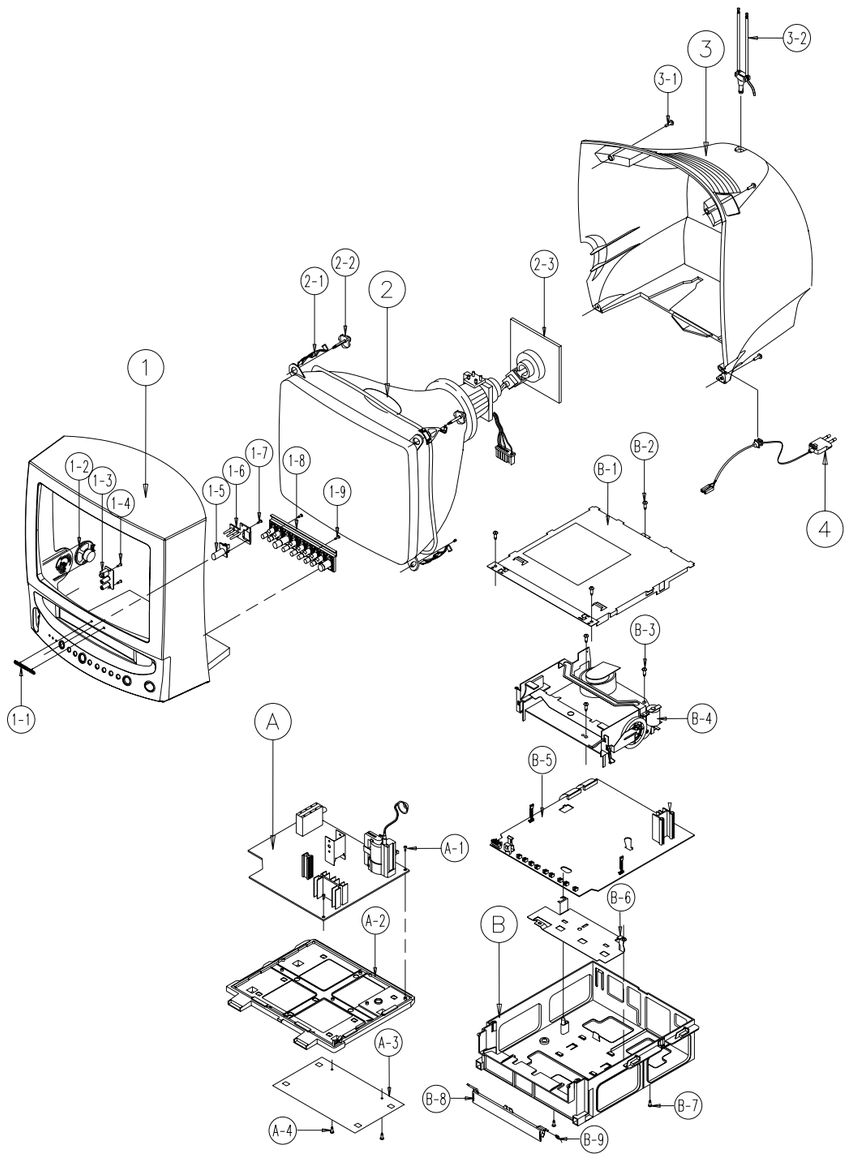


6-20 No Color During Record



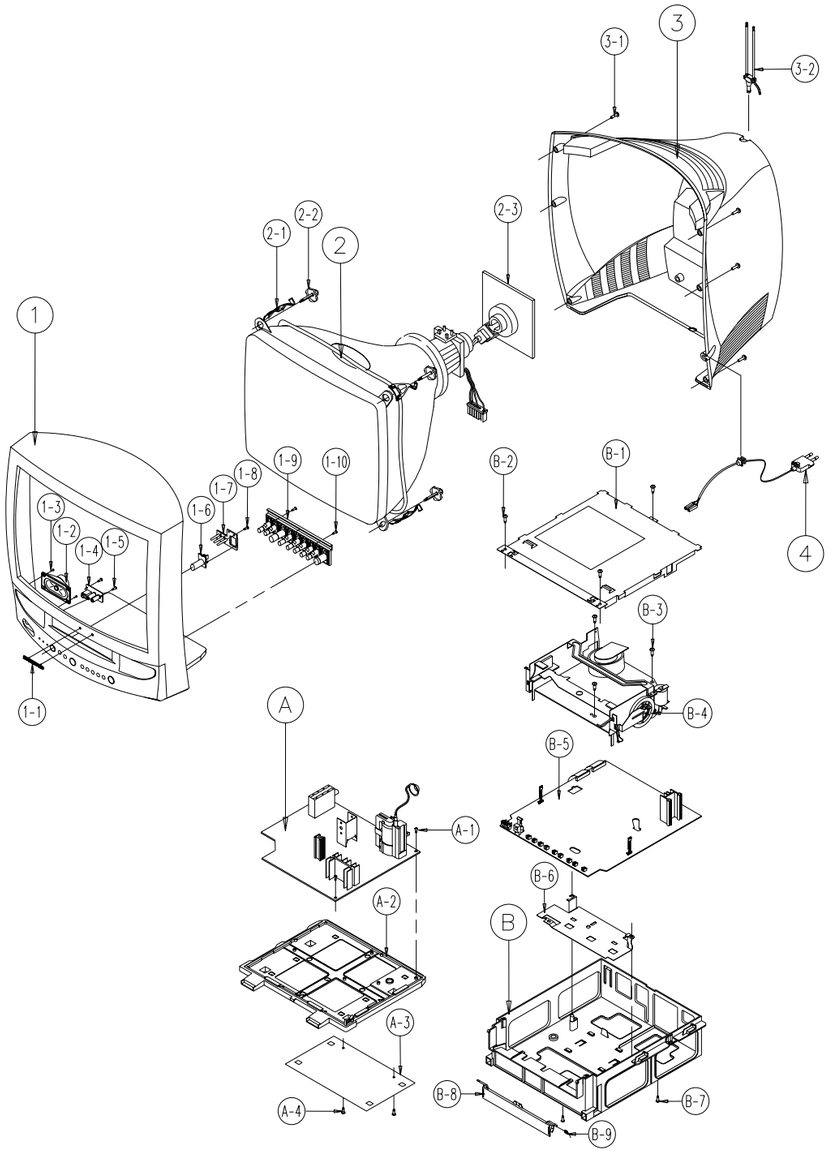
7. Exploded View & Parts List

7-1 TT14A54X



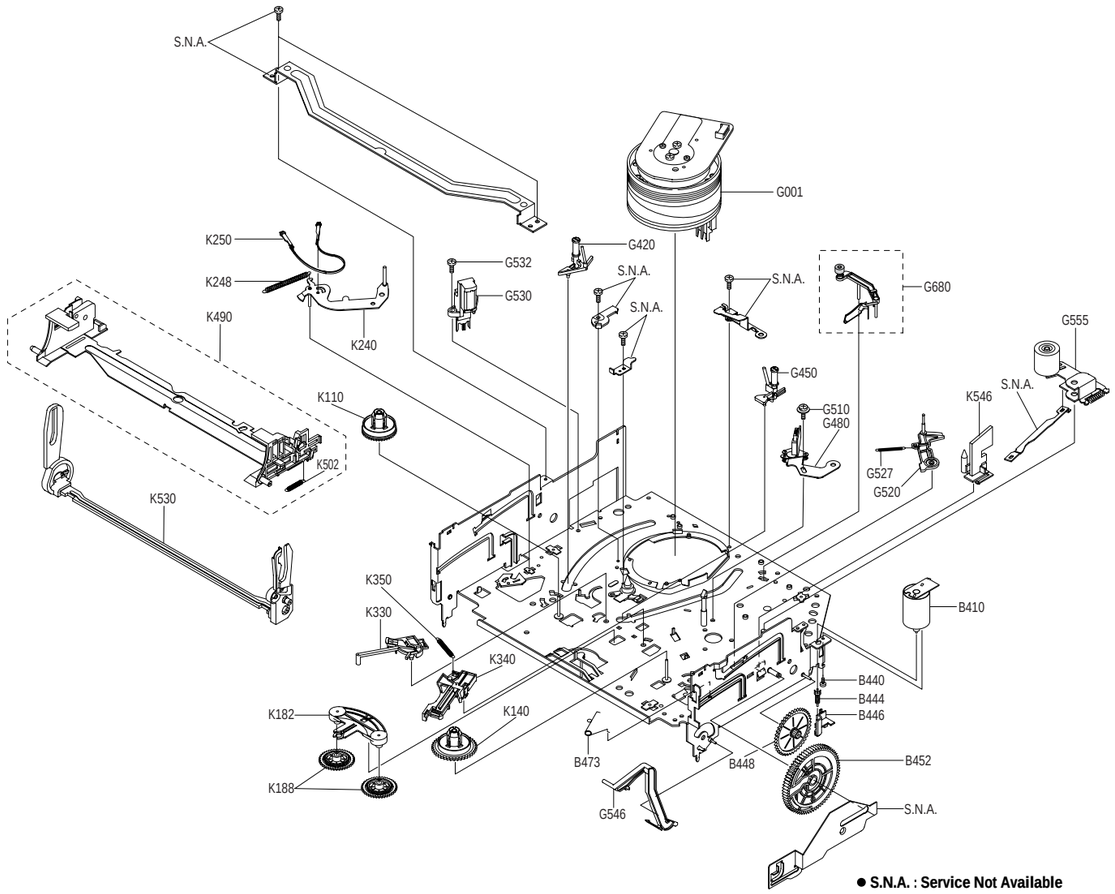
No	Code No.	Description;Specification	Q'ty	Remark
1	AA92-00002M	ASSY-CABINET,FRONT;TT14A5,MEX,V15A,14	1	
1-1	AA64-70009D	BADGE-BRAND;-,AL,-,L40,GOLD,R2	1	
1-2	3001-000281	SPEAKER-GENERAL;2.5W8OHM77MM77	1	
1-3	2001-001187	ASSY-PCB,A/V;-,KCV13A,V15A,13,19	1	
1-4	L9100-0003	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	2	AV+CF
1-5	AA64-00018A	WINDOW-REMOCON;-,TT13/19A52,-,PC,VIOLET.	1	
1-6	AA64-00012A	INDICATOR-LED;-,TT13/19A52,-,PC,-,CLEAR.	1	
1-7	6003-000333	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	1	IL+CF
1-8	AA64-00011D	KNOB-FAMILY;-,TT14/20A5,PA100,ABS,HB,BLK	1	
1-9	6002-000512	SCREW-TAPPING;RH,+,2,M4,L12,ZP	2	KF+CF
2	AA03-10001D	CRT-COLOR;-,A34KQV42X,+380MG,14,90DEG,5	1	
2-1	L9400-0002	HOLDER-DEGAUSSING;20POLYVINIL	4	
2-2	AA60-10050R	SCREW-ASSY;WC,HH,+M5,L31.5,SWR	4	CRT+CF
2-3	3704-000103	SOCKET-CRT;10P,22.5PI,14.3PI,S	1	V999
3	AA64-00055B	CABINET-BACK;-,TT14A5,-,HIPS,HB,BLK,-	1	
3-1	6002-000514	SCREW-TAPPING;RH,+,2,M4,L15,ZP	6	CB+CF
3-2	L9400-0002	ANT-RODVHF;4SDODIPOLE500MMBRN	1	
4	AA61-20070A	POWERCORDEP2N/P;L3000-0001,2.1	1	
A	AA94-10149X	ASSY-PCB,MAIN(OPT);V15A,14,S/V,MEXICO	1	
A-1	AA60-10008A	SCREW-TAPPING;-,TH,+,M3,L10,ZP	7	PCB+HC
A-2	AA61-20231A	HOLDER-CHASSIS;DP,-,-,-,AA61-2	1	
A-3	AA63-00075A	SHIELD-CASE;SECC,T0.6,TS-DECK,ALL,V15A.	1	
A-4	6002-000510	SCREW-TAPPING;RH,+,2,M3,L8,ZPC	2	SC+HC
B	AA90-40008B	ASSY-FRAME;SAMEX,CKD,TVN502V	1	
B-1	LA63-00006A	ASSY-COVER/FRAME,TOP;CVR/FR+SHIELD-PLATE	1	
B-2	6002-000507	SCREW-TAPPING;RH,+,2,M3,L12,ZP	3	CFT+FD
B-3	6002-000522	SCREW-TAPPING;TH,+,2,M4,L15,ZP	3	DE+FD
B-4	AA91-40124A	ASSY-DECK;-,4HD,NTSC,X-9,DLCMEXICO	1	
B-5	AA94-80004K	ASSY-M/DECK;M-420N/SER.31,4HD,NTSC,-,TS	1	
B-6	AA63-40313A	SHIELD-BOTTOM;-,SPTE,T0.5,-,TVN334V	1	
B-7	6002-000507	SCREW-TAPPING;RH,+,2,M3,L12,ZP	2	FD+PCB
B-8	AA64-00024R	DOOR-HOUSING;4HD,ABS,HB,BLK,20A54(LATIN)	1	
B-9	AA61-00050A	SPRING-DOOR;-,SUS304,0.5,OD6,H9.7,N8,-,T	1	

7-2 TT20A54X



No	Code No.	Description;Specification	Q'ty	Remark
1	AA92-00002L	ASSY-CABINET,FRONT;TT20A5,MEX,V15A,19	1	
1-1	AA64-70010D	BADGE-BRAND;-,AL,-,L50,GOLD,R2	1	
1-2	3001-001037	SPEAKER;5W,8OHM,89DB,180HZ	1	
1-3	6003-000333	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	4	SPK+CF
1-4	LA95-40005S	ASSY-PCB,A/V;-,KCV13A,V15A,13,19		
1-5	6003-000333	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	2	AV+CF
1-6	AA64-00018A	WINDOW-REMOCON;-,TT13/19A52,-,PC,VIOLET.	1	
1-7	AA64-00012A	INDICATOR-LED;-,TT13/19A52,-,PC,-,CLEAR.	1	
1-8	AA64-00012A	INDICATOR-LED;-,TT13/19A52,-,PC,-,CLEAR.	1	
1-9	AA64-00011D	KNOB-FAMILY;-,TT14/20A5,PA100,ABS,HB,BLK	1	
1-10	6002-000512	SCREW-TAPPING;RH,+,2,M4,L12,ZP	2	KF+ CF
2	AA03-10029W	CRT-COLOR;A48KRD82X(H),+380MG,SEMI-TINT.	1	
2-1	L9400-0001	HOLDER-DEGAUSSING;25POLYVINYLCHLORIDEFL	4	
2-2	AA60-10050R	SCREW-ASSY;WC,HH,+M5,L31.5,SWR	4	CRT+CF
2-3	3704-001105	SOCKET-CRT;11P,20PI,26.5PI,NI,-	1	V999
3	AA64-00056B	CABINET-BACK;-,TT20A5,-,HIPS,HB,BLK,-	1	
3-1	6002-000514	SCREW-TAPPING;RH,+,2,M4,L15,ZP	6	CB+CF
3-2	L7000-0130	ANT-RODVHF;4SDODIPOLE500MMBRN	1	
4	L3000-0001	POWER-CORD,AC;DW-006/MSP-10/,SPC-2/2100	1	
A	AA94-10149W	ASSY-PCB,MAIN(OPT);V15A,19,S/V,MEXICO	1	
A-1	AA60-10008A	SCREW-TAPPING;-,TH,+,M3,L10,ZP	6	PCB+HC
A-2	AA61-20232A	HOLDER-CHASSIS;DP,-,-,-,AA61-2	1	
A-3	AA63-00075A	SHIELD-CASE;SECC,T0.6,TS-DECK,ALL,V15A.	1	
A-4	6002-000510	SCREW-TAPPING;RH,+,2,M3,L8,ZPC	2	SC+HC
B	AA90-40008B	ASSY-FRAME;SAMEX,CKD,TVN502V	1	
B-1	LA63-00006A	ASSY-COVER/FRAME,TOP;CVR/FR+SHIELD-PLATE	1	
B-2	6002-000507	SCREW-TAPPING;RH,+,2,M3,L12,ZP	3	CFT+FD
B-3	6002-000522	SCREW-TAPPING;TH,+,2,M4,L15,ZP	3	DE+FD
B-4	AA91-40124A	ASSY-DECK;-,4HD,NTSC,X-9,DLCMEXICO	1	
B-5	AA94-80004K	ASSY-M/DECK;M-420N/SER.31,4HD,NTSC,-,TS	1	
B-6	AA63-40313A	SHIELD-BOTTOM;-,SPTE,T0.5,-,TVN334V	1	
B-7	6002-000507	SCREW-TAPPING;RH,+,2,M3,L12,ZP	2	FD+PCB
B-8	AA64-00024R	DOOR-HOUSING;4HD,ABS,HB,BLK,20A54(LATIN)	1	
B-9	AA61-00050A	SPRING-DOOR;-,SUS304,0.5,OD6,H9.7,N8,-,T	1	

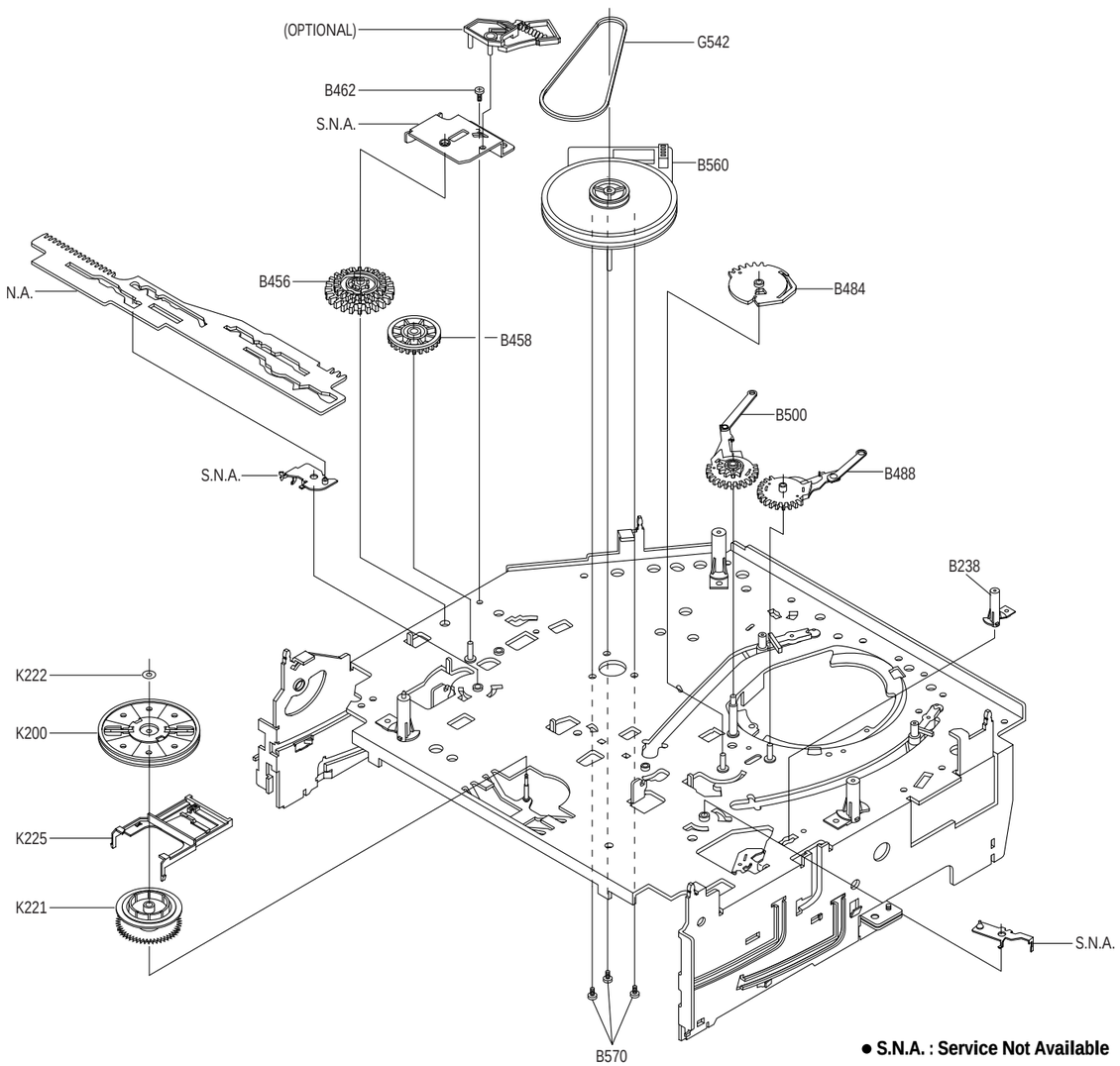
7-3 Mechanical Parts (Top Side)



● **S.N.A. : Service Not Available**

Loc. No	Parts No.	Description ; Specification	Remark
B410	AC31-12016A	MOTOR-LOADING ASSY;-,-,X-9	
B440	AC60-10515A	SCREW-MACHINE;-,PH,+,-,M3,L3,ZPC,-,YEL	
B444	AC66-20571A	GEAR-WORM;-,POM SW-01,0.5,2,-,4.5,X-9	
B446	AC61-21005A	HOLDER-WORM;-,POM M90-44,-,-,-,X-9	
B448	AC66-20573A	GEAR-WORM WHEEL;-,POM SW-01,0.6,11,-,6.6	
B452	AC66-20575A	GEAR-FL CAM;-,POM SW-01,M0.6,Z88,-,PCD58	
B473	AC61-60559A	SPRING-PINCH DRIVE;-,TS,SUS304,PI0.5,OD4	
G001	AC96-10481K	ASSY-CYLINDER;CX-9, NTSC 6HD	(6HD NON-DIAMOND HEAD)
	AC96-10481H	ASSY-CYLINDER;CX-9, NTSC 4HD	(4HD NON-DIAMOND HEAD)
	AC96-10481F	ASSY-CYLINDER;CX-9, NTSC 2HD	(2HD NON-DIAMOND HEAD)
G420	AC66-80142A	SLIDER-SUPPLY ASSY;-,X-9(TS),-,-,-,X-9	
G450	AC66-80141A	SLIDER-TAKE UP ASSY;-,X-9(TS),-,-,-,X-9	
G480	AC33-10217H	HEAD-ACE ASSY;-,-,-,-,X-9	
G510	AC60-10518A	SCREW-TAP TITE;-,PH,+,SW+ZW,M2.6,L5.6,ZP	
G520	AC66-30539A	LEVER-#9 GUIDE ASSY;-,X-9(TS),-,-,-,X-9	
G527	AC61-60553A	SPRING-#9 GUIDE;-,ES,SUS304-WPB,OD3.1,0.	
G530	AC33-10217G	HEAD-FE;VAA00000275,-,-,-,X-9	
G532	AC60-10519A	SCREW-TAP TITE;-,PH,+,-,M2.6,L8,ZPC	
G546	AC66-30535A	LEVER-FL DOOR;-,POM M90-44,-,-,BLK,X-9	
G555	AC59-90403A	UNIT-PINCH ASSY;X-9,-	
G680	AC66-30557A	LEVER-H/CLEANER ASSY;-,POM+URETHANE,-,-	(OPTIONAL)
K110	AC66-10267A	REEL-DISK S;-,POM M90-44,-,-,X-9	
K140	AC66-10268A	REEL-DISK T;-,POM M90-44,-,-,X-9	
K182	AC66-30524A	LEVER-IDLER;-,POM9044,-,-,-,-	
K188	AC66-20577A	GEAR-IDLER;-,PEBAX 7033,-,-,-,-,X-9	
K240	AC66-30538A	LEVER-TENSION ASSY;-,X-9(TS),-,-,-,X-9	
K248	AC61-60554A	SPRING-TENSION LEVER;-,ES,SUS304-WPB,OD3	
K250	AC63-12029A	BAND-BRAKE ASSY;-,X-9(TS),-,-,-,X-9	
K330	AC66-30550A	LEVER-S.BRAKE ASSY;-,POM+SUS,-,-,-,X-9	
K340	AC66-30549A	LEVER-T.BRAKE ASSY;-,POM+SUS,-,-,-,X-9	
K350	AC61-60564A	SPRING-BRAKE;-,TENSION,SWP-A,0.25,3,-,X-	
K490	AC61-21010A	HOLDER-CASS ASSY;-,SECC+POM+SUS,-,-,-,X-	
K502	AC61-60561A	SPRING-FL.LEVER-LR;-,ES,SUS304 WPB,PI2.7	
K530	AC66-30546A	LEVER-FL.ARM ASS'Y;-,SECC+POM+SUS,-,-,-,	
K546	AC61-50658A	GUIDE-CASS. DOOR;-,POM M90-44,-,-,NTR,-,	

7-4 Mechanical Parts (Bottom Side)



Loc. No	Parts No.	Description ; Specification	Remark
B238	AC61-50660A	SLEEVE-TENSION;-,POM M90-44,-,-,ID3,-,-	
B456	AC66-20576A	GEAR-JOINT 1;-,POM SW-01,M1.0,Z22,-,PCD2	
B458	AC66-20574A	GEAR-JOINT 2;-,POM SW-01,M1.0,Z14,-,PCD1	
B462	AC60-10517A	SCREW-TAP TITE;-,PH,+,-,M2.6,L5,ZPC,-,YE	
B484	AC66-20580A	GEAR-LOADING DRIVE;-,POM SW-01,M1.0,Z32,	
B488	AC66-30543A	LEVER-S LOAD ASSY;-,-,-,-,-,X-9	
B500	AC66-30542A	LEVER-T LOAD ASSY;-,-,-,-,-,X-9	
B560	AC31-12017A	MOTOR-CAPSTAN;DMVCMC07C,-,X-9	
B570	AC60-10514A	SCREW-CAPSTAN;-,PH,+,M2.6,L6,-	
G542	AC66-60051A	BELT-PULLEY;-,5CM-70,2 * 2,-,71.3,-,X-9	
K200	AC61-21012A	HOLDER-CLUTCH ASSY;-,-,-,-,-,X-9	
K221	AC66-20581A	GEAR-CENTER ASSY;-,POM,M=0.5,-,HIGHT T.,	
K222	AC60-30306A	WASHER-SLIT;-,-,ID2.1,OD5.0,T0.5,-,POLYS	
K225	AC66-30547A	LEVER-UP DOWN ASSY;-,POM+SUS,-,-,-,X-9	

● **S.N.A. : Service Not Available**

8. Electric Parts List

8-1 TT14A54X/XAX (TT20A54X/XAX and TT14A54X/XAX Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark

ASSY-PCB,MAIN(OPT)

	* AA94-10149X	ASSY-PCB,MAIN(OPT);V15A,14,S/V,MEXICO	
C402	2306-000326	C-FILM,MPPF;4.7nF,5%,1.6KV,TP,28.5x16x9m	
HCOCHA	AA61-20231A	HOLDER-CHASSIS;DP,-,-,-,AA61-	
R257	2008-000266	R-FUSIBLE(S);1OHM,5%,2W,AF,TP	
R304	2001-001120	R-CARBON(S);3.3OHM,5%,1/2W,AA	
R407	2003-000644	R-METAL OXIDE(S);300ohm,5%,2W,AA,TP,4x12	
R411	2004-001389	R-METAL(S);196KOHM,1%,1/2W,AA	
R510	2001-000568	R-CARBON;27OHM,5%,1/8W,AA,TP,	
R511	2001-000568	R-CARBON;27OHM,5%,1/8W,AA,TP,	
R512	2001-000568	R-CARBON;27OHM,5%,1/8W,AA,TP,	
R513	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP	
R514	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP	
R516	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP	
RX03	2004-001987	R-METAL;4.3KOHM,1%,1/2W,AA,TP	
T444	AA26-00004A	TRANS-FLYBACK;-,FSA38026S,13	
⚠ V999	3704-000103	SOCKET-CRT;10P,22.5PI,14.3PI,	

ASSY-CRT

	* AA97-50001C	ASSY-CRT;A34KQV42X,-,14INCH,ITC,-,MINI(	
C-Y	AA27-00001A	MAGNET-CONVERGENCE;JH225-06A,225MM	
⚠ CRT	AA03-10001D	CRT-COLOR;-,A34KQV42X,+380MG,14,90DEG,5	
D-Y	L7000-0005	DEFL-YOKE(SEMSA);DSE-1422FL	

Loc. No.	Code No.	Description ; Specification	Remark

ASSY-CABINET,FRONT

	* AA92-00002M	ASSY-CABINET,FRONT;TT14A5,MEX,V15A,14	
B/C	AA64-00055B	CABINET-BACK;-,TT14A5,-,HIPS,HB,BLK,-	
BADGE	AA64-70009D	BADGE-BRAND;-,AL,-,L40,GOLD,R	
BOSS	L3113-0003-000	BOSS-CABINET;HIPSHBBLK	
CDCOIL	L9400-0002	HOLDER-DEGAUSSING;20POLYVINI	
CP	AA64-20060D	CONTROL-PANEL;HIPS,HB,BLK,PA100,TT14A5	
D-COIL	AA27-20004C	COIL-DEGAUSSING;-,14,4.5ohm,30T,L890,D	
F/C	AA64-00123A	ASSY-FRONT;HIPS,HB,BLK,PA100,TT14A5	
F/C	AA64-00123B	CABINET-FRONT;HIPS,HB,BLK,PA100,TT14A5	

ASSY-SPEAKER

	* AA96-40056A	ASSY-SPEAKER;-,8OHM,2W,77BR02N,-,L200	
SPK	3001-000281	SPEAKER-GENERAL;2.5W8OHM77MM7	
L/SPK	AA39-20500A	LEAD CONNECTOR-ASSY;-,67096-003,REC,3(2)	

8-2 TT20A54X/GSU (TT20A54X/XAX and TT20A54X/GSU Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark

ASSY-PCB,MAIN(OPT)

	* AA94-10149Q	ASSY-PCB,MAIN(OPT);V15A,19,F/V,TS-DECK	
RP801	1404-001048	POSISTOR;7OHM,3P	
C804	2401-002219	C-AL;220UF,20%,400V,-,25X40,10MM,ST	
⚠ IC801	1203-001494	IC-PEM CONTROLLER;3S0680RF,TO3PF-5L,5,21	
PWR/AC	AA96-20051G	ASSY-POWER,CORD;-,CP2/NO(4.0),H/C250,KKP	

ASSY-CABINET,FRONT

	* AA92-00002I	ASSY-CABINET,FRONT;TT20A5,LATIN,V15A,19	
D-COIL	AA27-20003X	DEGAUSSING-COIL;20,14.4OHM,4|T	
CDCO/L	L9400-0002	HOLDER-DEGAUSSING;20POLYVINI|	

Loc. No.	Code No.	Description ; Specification	Remark

ASSY-CRT

	* AA94-50014K	ASSY-CRT;A48KRD82X(HB),0MG,20|	
⚠ CRT	AA03-10030L	CRT-COLOR;A48KRD82X(HB),0MG,BI0,S-TINT	
C-Y	AA27-00002A	MAGNET-CONVERGENCE;JH291-SC-OB,29.1M	

ASSY-ACCESSORY

PLUG	3721-000136	PLUG-CONVERSION;15A300VPI4.0C|	

8-3 TT20A54X/RCL (TT20A54X/XAX and TT20A54X/RCL Dissimilar Parts)

Loc. No.	Code No.	Description ; Specification	Remark

ASSY-CABINET,FRONT

	* AA92-00002I	ASSY-CABINET,FRONT;TT20A5,LATIN,V15A,19	
D-COIL	AA27-20003X	DEGAUSSING-COIL;20,14.4OHM,4	
CDCOIL	L9400-0002	HOLDER-DEGAUSSING;20POLYVINI	

ASSY-CRT

	* AA94-50014K	ASSY-CRT;A48KRD82X(HB),0MG,20	
⚠ CRT	AA03-10030L	CRT-COLOR;A48KRD82X(HB),0MG,BI0,S-TINT	
C-Y	AA27-00002A	MAGNET-CONVERGENCE;JH291-SC-OB,29.1M	

Loc. No.	Code No.	Description ; Specification	Remark

ASSY-PCB,MAIN(OPT)

	* AA94-10149Q	ASSY-PCB,MAIN(OPT);V15A,19,F/V,TS-DECK	
RP801	1404-001048	POSISTOR;7OHM,3P	
C804	2401-002219	C-AL;220UF,20%,400V,-,25X40,10MM,ST	
⚠ IC801	1203-001494	IC-PEM CONTROLLER;3S0680RF,TO3PF-5L,5,21	H/SINK
PWR/AC	AA96-20051G	ASSY-POWER,CORD;-,CP2/NO(4.0),H/C250,KKP	

8-3 TT20A54X/XAX

Loc. No.	Code No.	Description ; Specification	Remark

ASSY-PCB,MAIN(OPT)

	* AA94-10149W	ASSY-PCB,MAIN(OPT);V15A,19,S/V,MEXICO	
C101	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
C102	2401-000660	C-ELECTROLYTIC;CE04WTAPG50V2.2	
C104	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
C108	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C109	2401-003102	C-AL;100uF,20%,10V,GP,TP,5x11,5	
C150	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C151	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
C152	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C153	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
C201	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50	
C202	2401-001333	C-ELECTROLYTIC;CE04WTAPG50V0.4	
C203	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
C204	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C205	2401-001333	C-ELECTROLYTIC;CE04WTAPG50V0.4	
C206	2202-000807	C-CERAMIC,MLC-AXIAL;22nF,+80-20%,25V,Y5V	
C207	2401-001333	C-ELECTROLYTIC;CE04WTAPG50V0.4	
C208	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C209	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
C210	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
C211	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
C212	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
C213	2201-000193	C-CERAMIC,DISC;10PF,0.25PF,50V	
C214	2401-000660	C-ELECTROLYTIC;CE04WTAPG50V2.2	
C215	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
C216	2202-000205	C-CERAMIC,MLC-AXIAL;22PF,5%,50	
C217	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50	
C218	2301-000395	C-FILM,PEF;18nF,5%,50V,TP,6.5x12.5x3.5mm	
C219	2401-001625	C-AL;6.8UF,20%,50V,GP,5X11MM,5	
C220	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
C221	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
C222	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
C224	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C225	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C226	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
C227	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
C229	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
C230	2306-000122	C-FILM,MPPF;100NF,5%,50V,7.3X4	
C232	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
C233	2401-000647	C-ELECTROLYTIC;CE04WTAPG50V2.2	
C234	2301-000232	C-FILM,PEF;3.3NF,5%,50V,8.1X4.	
C237	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
C238	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
C239	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
C240	2401-001363	C-AL;470UF,20%,16V,GP,TP,10X12	
C241	2401-001363	C-AL;470UF,20%,16V,GP,TP,10X12	
C301	2301-000016	C-FILMPEF;22NF,5%,100V,TP,7.2X	
C302	2201-000556	C-CERAMIC,DISC;470PF,10%,500V,	
C303	2201-000982	C-CERAMIC,DISC;10NF,+80-20%,50	
C304	2401-000553	C-AL;1UF,10%,50V,GP,5X11MM,5MM	
C305	2305-000427	C-FILM,MPEF;47NF,5%,100V,7.5X1	
C306	2401-000173	C-AL;1000uF,20%,35V,GP,TP,13x25,5	
C308	2301-000310	C-FILM,PEF;68NF,5%,50V,8.0X8.5	
C309	2401-000360	C-AL;100UF,20%,50V,GP,8X11MM,5	
C310	2401-000493	C-AL;10UF,20%,50V,WT,5X11MM,5M	
C311	2401-001333	C-ELECTROLYTIC;CE04WTAPG50V0.4	
C312	2401-000553	C-AL;1UF,10%,50V,GP,5X11MM,5MM	
C313	2305-000470	C-FILM,MPEF;68NF,5%,100V,-,5MM	
C401	2301-000016	C-FILMPEF;22NF,5%,100V,TP,7.2X	
C402	2306-000330	C-FILM;CF922P1.6KVT772-HBUP	
C404	2306-000193	C-FILM,MPPF;360NF,5%,200V,-,7.	
C405	2305-000704	C-M,POLYESTER;CFS922MTAPG250V1	
C406	2201-000556	C-CERAMIC,DISC;470PF,10%,500V,	
C407	2401-001415	C-AL;470UF,20%,35V,GP,TP,10X20MM,5M	
C408	2201-000556	C-CERAMIC,DISC;470PF,10%,500V,	
C409	2401-000832	C-AL;220UF,20%,25V,GP,8X11MM,5	
C410	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
C411	2201-000556	C-CERAMIC,DISC;470PF,10%,500V,	
C412	2401-003114	C-AL;4.7UF,20%,250V,WT,TP,10X1	
C413	2401-000560	C-AL;1UF,20%,160V,GP,GT,6.3,11MM	
C444	2201-000441	C-CERAMIC,DISC;3.3nF,10%,500V,Y5P,TP,10x	
C445	2201-000441	C-CERAMIC,DISC;3.3nF,10%,500V,Y5P,TP,10x	
C501	2202-000231	C-CERAMIC,MLC-AXIAL;330PF,10%,50V,Y5P,3.	
C502	2202-000231	C-CERAMIC,MLC-AXIAL;330PF,10%,50V,Y5P,3.	
C503	2202-000263	C-CERAMIC,MLC-AXIAL;470PF,10%,50V,Y5P,3.	
C505	2201-002063	C-CERAMIC,DISC;10nF,+80-20%,3KV,Y5V,TP,1	
C601	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
C602	2301-000224	C-FILM,PEF;22NF,5%,50V,7.4X3.9	
C603	2401-000660	C-ELECTROLYTIC;CE04WTAPG50V2.2	
C604	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C605	2401-001363	C-AL;470UF,20%,16V,GP,TP,10X12	
C609	2401-001397	C-AL;470UF,20%,25V,GP,10X16MM,	
C611	2202-000279	C-CERAMIC,MLC-AXIAL;47PF,5%,50	
C612	2202-000279	C-CERAMIC,MLC-AXIAL;47PF,5%,50	

Loc. No.	Code No.	Description ; Specification	Remark
C801	2306-000318	C-FILM,MPPF;220NF,20%,250V,-,2	
C803	2201-000987	C-CERAMIC,AC;CK45PE400V222-M(T	
C804	2401-003024	C-AL;220UF,20%,200V,WT,TP,22X35.1MM	
C805	2303-000163	C-FILM,PPF;2.2NF,5%,800V,-,-,T	
C806	2301-000310	C-FILM,PEF;68NF,5%,50V,8.0X8.5	
C807	2305-000665	C-FILM;CF922N63VT104-J-40/1053	
C808	2401-001571	C-ELECTROLYTIC;CE04WTAPG50V47-	
C809	2301-000016	C-FILMPEF;22NF,5%,100V,TP,7.2X	
C810	2201-000987	C-CERAMIC,AC;CK45PE400V222-M(T	
C812	2201-000991	C-CERAMIC,HIC;CK45(T)B2KV561-K	
C813	2201-000599	C-CERAMIC,DISC;560PF,10%,500V,	
C814	2401-000262	C-AL;100UF,20%,160V,GP,16X25MM,5MM,	
C815	2401-001486	C-AL;47UF,20%,160V,HR,13X20MM,5MM,T	
C816	2401-002215	C-AL;2200UF,20%,25V,(105RD)13X	
C817	2401-001998	C-AL;1000UF,20%,25V,GP,TP,10X20	
C818	2301-000192	C-FILM,PEF;1NF,5%,50V,5.3X10MM	
C819	2201-000374	C-CERAMIC,DISC;220pF,5%,50V,CH,TP,12.5x3	
C820	2201-000556	C-CERAMIC,DISC;470PF,10%,500V,	
C821	2401-002286	C-ELEC;CE04D16VT471-MFR10X12.5	
C822	2401-001363	C-AL;470UF,20%,16V,GP,TP,10X12	
C823	2401-001363	C-AL;470UF,20%,16V,GP,TP,10X12	
C824	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C825	2305-000665	C-FILM;CF922N63VT104-J-40/1053	
C826	2401-000302	C-AL;100UF,20%,25V,GP,6X11MM,5	
C827	2305-000665	C-FILM;CF922N63VT104-J-40/1053	
C901	2306-000122	C-FILM,MPPF;100NF,5%,50V,7.3X4	
C902	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50	
C903	2401-001363	C-AL;470UF,20%,16V,GP,TP,10X12	
C906	2201-000483	C-CERAMIC,DISC;33PF,5%,50V,NPO	
C907	2401-000962	C-AL;22uF,20%,50V,GP,TP,5x11,5	
C908	2201-000961	C-CERAMIC,DISC;10pF,0.5pF,50V,RH,TP,5x3m	
C909	2401-002594	C-AL;220uF,20%,16V,GP,TP,8x11.5,5	
C910	2201-000257	C-CERAMIC,DISC;16PF,5%,50V,NPO	
C912	2301-000310	C-FILM,PEF;68NF,5%,50V,8.0X8.5	
C913	2202-000164	C-CERAMIC,MLC-AXIAL;180PF,10%,	
C914	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
C915	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
C916	2202-000210	C-CERAMIC,MLC-AXIAL;270pF,10%,50V,Y5P,TP	
CN201	3711-003641	CONNECTOR-HEADER;BOX,12P,1R,2.	
CN501	AA39-20620A	LEADCONNECTOR-ASSY;-,YBNH025-09,S,9P,30	
CN601	3711-002642	POST-HEADER;67094-003(AUTO)	
CN602	3711-002645	POST-HEADER;67094-006(AUTO)	
CN902	3711-003641	CONNECTOR-HEADER;BOX,12P,1R,2.	
CWIRE3	AA65-30104B	CLAMP WIRE; NYLON 66, V2,BLK, W2 Z5	
CX01	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CX02	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
CX03	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
D101	0403-000700	DIODE-ZENER;TZP33A,33V,31-35V,	
D102	0403-000296	DIODE-ZENER;EQA02-06A/MTZ5.6B(	
D201	0403-000663	DIODE-ZENER;MTZ3.3B,3.3V,3.32-	
D202	0401-000005	DIODE;1N4148TAPG	
D203	0401-000005	DIODE;1N4148TAPG	
D204	0401-000005	DIODE;1N4148TAPG	
D205	0403-000296	DIODE-ZENER;EQA02-06A/MTZ5.6B(	
D206	0401-000005	DIODE;1N4148TAPG	
D207	0401-000005	DIODE;1N4148TAPG	
D208	0401-000005	DIODE;1N4148TAPG	
D301	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40	
D401	0401-000005	DIODE;1N4148TAPG	
D402	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
D403	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40	
D404	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40	
D405	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40	
D407	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40	
D601	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-	
D801	0402-000213	DIODE-RECTIFIER;ERB12-06,600V,	
D802	0402-000213	DIODE-RECTIFIER;ERB12-06,600V,	
D803	0402-000213	DIODE-RECTIFIER;ERB12-06,600V,	
D804	0402-000213	DIODE-RECTIFIER;ERB12-06,600V,	
D805	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40	
D806	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40	
D807	0402-000540	DIODE-RECTIFIER;RU20A,600V,1.5	
D808	0402-001105	DIODE-RECTIFIER;ERB43-04SV1,40	
D809	0404-001056	DIODE-SCHOTTKY;RK16,60V,1.5A,DO-204AC,TP	
D810	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
D813	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
D814	0404-001056	DIODE-SCHOTTKY;RK16,60V,1.5A,DO-204AC,TP	

Loc. No.	Code No.	Description ; Specification	Remark
D815	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
D817	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
D901	0403-000355	DIODEZENER;UZ5.1BSB,4.97~5.17V,0.5UA,500	
D903	0401-000005	DIODE;1N4148TAPG	
D904	0401-000005	DIODE;1N4148TAPG	
DX01	0403-000297	DIODE-ZENER;EQA02-06D/MTZ6.2B(	
DX02	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DZ801	1405-001036	VARISTOR;430V,2500A,14x8.5mm,TP	
DZ802	0403-000300	DIODE-ZENER;MTZ8.2B,7.78-.19V,	
DZ803	0403-000296	DIODE-ZENER;EQA02-06A/MTZ5.6B(	
DZ804	1405-001036	VARISTOR;430V,2500A,14x8.5mm,TP	
DZ805	0403-000551	DIODE-ZENER;MTZ3.9B,3.9V,3.89-4.16V,500M	
F801	3601-001012	FUSE-FERRULE;250V,4A,SLOW-BLOW	
F801A	3602-000114	FUSE-HOLDER;-,-,30MOHM	
F801B	3602-000114	FUSE-HOLDER;-,-,30MOHM	
GT101	AA39-20010B	LEAD-CONNECTOR,ASSY;-,YFH800-01,500MM,1P	
HLDCHA	AA61-20232A	HOLDER-CHASSIS;DP,-,-,-,AA61-2	
HOLDER/C	AA61-20070A	HOLDER-CORD;PP,VO,BLK,KE-0002	
⚠ IC201	1204-001259	IC-VIDEOSYSTEM;TA1282N,DIP,56P	
⚠ IC202	1001-000216	IC-RF/V1/AUDIOS/W;KA8404,SPDTC	
⚠ IC301	1204-000475	IC;KA2131	H/SINK
⚠ IC601	1201-001200	IC-POWERAMP;7267,DIP,8P,346MIL	
⚠ IC801	1203-001493	IC-PEM CONTROLLER;3S0765RF,TO3PF-5L,5,21	H/SINK
⚠ IC802	1203-000284	IC-POSI.FIXEDREG.;7806,TO-220,	H/SINK
⚠ IC901	AA13-00021A	IC-MCU;-,Z9036512PSC-R4133,16BIT,SDIP	
⚠ IC902	1103-001107	IC-EEPROM;24C020,256X8BIT,DIP,8P,300MIL	
⚠ IC903	1202-000001	IC-VOLTAGECOMP.;7533,TO;-92,3P	
L150	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
L151	2701-000158	INDUCTOR-AXIAL;22UH,10%,2.5X3.	
L152	2701-000326	INDUCTOR AXIAL;560NH,10%,2.3X3.4MM	
L201	AA26-10004K	TRANS-IF;-,7MG,SIF,-,7MM,100PF	
L202	2701-000207	INDUCTOR-AXIAL;56UH,5%,2.5X3.4	
L203	2701-000158	INDUCTOR-AXIAL;22UH,10%,2.5X3.	
L204	2701-000207	INDUCTOR-AXIAL;56UH,5%,2.5X3.4	
L205	AA26-10004C	TRANS-IF;-,7MG,VIF,0.37UH,7MM,	
L206	2701-000111	INDUCTOR-AXIAL;100UH,10%,2.5X3	
L207	3301-000287	CORE-FERRITEBEAD;AA,3.5X1.0X6.	
L301	2701-000116	INDUCTOR-AXIAL;10UH,10%,4.2X9.	
L401	AA27-30001B	COIL-LINEARITY;-,195UH,QIC1010	
L402	2701-001032	INDUCTOR-AXIAL;100UH,10%,5X14MM	
L403	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
L602	2701-000158	INDUCTOR-AXIAL;22UH,10%,2.5X3.	
L801	AA29-30001R	FILTER-LINE;-,6MH,2.0A,-,SQ191	
L802	3301-001223	CORE-FERRITE BEAD;AB,-,3.5X5X0.8MM,-,TP,	
L803	3301-001223	CORE-FERRITE BEAD;AB,-,3.5X5X0.8MM,-,TP,	
L804	3301-000287	CORE-FERRITEBEAD;AA,3.5X1.0X6.	
L806	2701-001032	INDUCTOR-AXIAL;100UH,10%,5X14MM	
L807	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.	
L808	3301-000287	CORE-FERRITEBEAD;AA,3.5X1.0X6.	
L809	2901-000297	FILTER-EMI ON BOARD;-,3A,-,-,3.5x5,TP,-	
L810	2701-000207	INDUCTOR-AXIAL;56UH,5%,2.5X3.4	
L811	2901-000299	FILTER-EMIBEAD;BL02RN2-R65T2DB	
L812	3301-001223	CORE-FERRITE BEAD;AB,-,3.5X5X0.8MM,-,TP,	
L901	2701-000111	INDUCTOR-AXIAL;100UH,10%,2.5X3	
NT801	1404-000187	THERMISTOR;KL11L4R7-3.5A4.7OHM	
PC802	0604-001038	PHOTOCOUPLER;TR,130-260%,200MW	
PCB+HC	AA60-10008A	SCREW-TAPPING;-,TH,+,M3,L10,ZP	
POWER/C	L3000-0001	POWER-CORD,AC;DW-006/MSP-10/,SPC-2/2100	
PWR/AC	L3000-0005	POWERCORDEP2N/P;L3000-0001,2.1	
Q151	0501-000436	TR-SMALLSIGNAL;KTC3197,NPN,30V	
Q201	0501-000389	TRANSISTOR;KSC815-Y(TAPG)/YTAM	
Q202	0501-000389	TRANSISTOR;KSC815-Y(TAPG)/YTAM	
Q203	0501-000389	TRANSISTOR;KSC815-Y(TAPG)/YTAM	
Q204	0501-000389	TRANSISTOR;KSC815-Y(TAPG)/YTAM	
⚠ Q401	0502-001115	TR-POWER;KSC5386,NPN,50W,TO-3PF,ST,8	
⚠ Q402	0501-000369	TRANSISTOR;KSC2331-Y(TAPG)	
Q501	0501-002014	TR-SMALLSIGNAL;KSC2330-RNPN	
Q502	0501-002014	TR-SMALLSIGNAL;KSC2330-RNPN	
Q503	0501-002014	TR-SMALLSIGNAL;KSC2330-RNPN	
⚠ Q801	1203-001217	IC-POST,ADJUSTREG;431,T0-92,3P,4.58MIL,P	
⚠ Q803	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,2	
⚠ Q804	0501-000316	TR-SMALLSIGNAL;KSA928A-Y,PNP,1	
⚠ Q805	0501-000369	TRANSISTOR;KSC2331-Y(TAPG)	
Q902	0501-000389	TRANSISTOR;KSC815-Y(TAPG)/YTAM	
QX01	0501-000283	TRANSISTOR;KSA539-Y(TAPG)/YTAM	
R101	2004-001027	R-METAL;5.6KOHM,5%,1/8W,AA,TP,	
R102	2001-001000	R-METAL;82Kohm,5%,1/8W,AA,TP,1.8x3.2mm	

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R103	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R104	2003-001037	R-METAL(OXIDE);39OHM,5%,2W,AF,	
R152	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP	
R153	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
R154	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R155	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R156	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1	
R158	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP,1	
R159	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP,1	
R201	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R202	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
R203	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
R204	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,	
R205	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,	
R206	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,	
R207	2001-001111	R-CARBON(S);240OHM,5%,1/2W,AA,	
R208	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,	
R209	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,	
R210	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,	
R211	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R212	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R213	2001-000837	R-CARBON;51KOHM,5%,1/8W,AA,TP,	
R214	2001-001071	R-CARBON(S);12KOHM,5%,1/2W,AA,	
R215	2004-001402	R-METAL(S);6.8KOHM,1%,1/2W,AA,	
R216	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1	
R217	2001-000702	R-CARBON;39KOHM,5%,1/8W,AA,TP,	
R218	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP	
R219	2001-000674	R-CARBON;360OHM,5%,1/8W,AA,TP,	
R221	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,	
R222	2001-000989	R-METAL;820Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R223	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R226	2001-000773	R-CARBON;470KOHM,5%,1/8W,AA,TP	
R227	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP	
R228	2001-000258	R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R229	2001-000258	R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R230	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP	
R231	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP	
R232	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R233	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R235	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP	
R236	2001-000548	R-CARBON;270KOHM,5%,1/8W,AA,TP	
R237	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R238	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R239	2001-000947	R-CARBON;7.5KOHM,5%,1/8W,AA,TP	
R240	2001-000577	R-CARBON;2KOHM,5%,1/8W,AA,TP,1	
R241	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,	
R242	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,	
R244	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
R246	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R247	2001-000832	R-CARBON;510OHM,5%,1/8W,AA,TP,	
R251	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP	
R252	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP	
R253	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP	
R257	2008-001018	R-FUSIBLE(S);0.47OHM,10%,2W,AF	
R280	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP	
R301	2001-000003	R-CARBON;330OHM,5%,1/8W,AA,TP,	
R302	2001-000003	R-CARBON;330OHM,5%,1/8W,AA,TP,	
R303	2001-000864	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R304	2001-001100	R-CARBON(S);2.7OHM,5%,1/2W,AA,	
R305	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,	
R306	2001-001000	R-METAL;82Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
R307	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,	
R308	2001-000633	R-CARBON;30KOHM,5%,1/8W,AA,TP,	
R309	2003-000537	R-METALOXIDE(S);1KOHM,5%,1W,AD	
R401	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R402	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,	
R403	2001-001114	R-CARBON(S);270OHM,5%,1/2W,AA,	
R404	2001-000117	R-CARBON(S);68ohm,5%,1/2W,AA,TP,2.4x6.4m	
R405	2003-000540	R-METALOXIDE(S);1KOHM,5%,2W,AD	
R406	2003-002071	R-METALOXIDE;560OHM,5%,2W,AF,TP,3.9X10MM	
R407	2003-000455	R-METALOXIDE(S);100OHM,5%,2W,AA,TP,4X12M	
R408	2004-001390	R-METAL(S);1KOHM,2%,1/2W,AA,TP	
R409	2008-000253	R-FUSIBLE(S);0.47OHM,5%,1W,AF,	
R410	2008-000206	R-FUSIBLE(S);1OHM,5%,1/2W,AF,T	
R411	2004-001384	R-METAL(S);150KOHM,1%,1/2W,AA,TP,2.4X6.4	
R412	2001-000020	R-CARBON(S);22OHM,5%,1/2W,AA,T	
R413	2001-001037	R-CARBON(S);0.39OHM,5%,1/2W,AA	

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R415	2003-000784	R-METAL OXIDE(S);7.5KOHM,5%,2W,AF,TP,3.7	
R416	2001-000022	R-CARBON(S);33OHM,5%,1/2W,AA,T	
R444	2001-000109	R-CARBON(S);470OHM,5%,1/2W,AA,	
R501	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP,1	
R502	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP,1	
R503	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP,1	
R504	2003-000784	R-METAL OXIDE(S);7.5KOHM,5%,2W,AF,TP,3.7	
R504A	2003-000784	R-METAL OXIDE(S);7.5KOHM,5%,2W,AF,TP,3.7	
R505	2003-000784	R-METAL OXIDE(S);7.5KOHM,5%,2W,AF,TP,3.7	
R505A	2003-000784	R-METAL OXIDE(S);7.5KOHM,5%,2W,AF,TP,3.7	
R506	2003-000784	R-METAL OXIDE(S);7.5KOHM,5%,2W,AF,TP,3.7	
R506A	2003-000784	R-METAL OXIDE(S);7.5KOHM,5%,2W,AF,TP,3.7	
R507	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R508	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R509	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R513	2001-000674	R-CARBON;360OHM,5%,1/8W,AA,TP,	
R514	2001-000674	R-CARBON;360OHM,5%,1/8W,AA,TP,	
R515	2002-001006	R-COMPOSITION;RC1/2T4.7KK/ERC-	
R516	2001-000674	R-CARBON;360OHM,5%,1/8W,AA,TP,	
R518	2008-001013	R-FUSIBLE(S);1.2ohm,5%,2W,AF,TP,3.9x10mm	
R602	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,	
R610	2001-000577	R-CARBON;2KOHM,5%,1/8W,AA,TP,1	
R611	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R612	2001-000605	R-CARBON;3.6KOHM,5%,1/8W,AA,TP	
R801	2002-001010	R-COMPOSITION;1.8MOHM,10%,1/2W,AA,TP,3	
R804	2003-000994	R-METALOXIDE(S);33KOHM,5%,2W,AF,TP,3.9X1	
R805	2003-000994	R-METALOXIDE(S);33KOHM,5%,2W,AF,TP,3.9X1	
R807	2001-001163	R-CARBON(S);560OHM,5%,1/2W,AA,	
R808	2001-001178	R-CARBON(S);680OHM,5%,1/2W,AA,	
R809	2001-000022	R-CARBON(S);33OHM,5%,1/2W,AA,T	
R810	2001-001134	R-CARBON(S);360OHM,5%,1/2W,AA,TP,2.4X6.4	
R811	2002-001013	R-COMPOSITION;4.7MOHM,10%,1/2W,AA,TP,3.7	
R812	2001-001078	R-CARBON(S);15KOHM,5%,1/2W,AA,	
R813	2001-001078	R-CARBON(S);15KOHM,5%,1/2W,AA,	
R814	2001-001178	R-CARBON(S);680OHM,5%,1/2W,AA,	
R815	2004-004089	R-METAL;123KOHM,1%,1/2W,AA,TP,2.5X6.5	
R816	2001-001054	R-CARBON(S);1.6KOHM,5%,1/2W,AB,TP,2.4X6.	
R817	2001-000019	R-CARBON(S);10ohm,5%,1/2W,AA,TP,2.4x6.4m	
R820	2003-000490	R-METALOXIDE(S);12OHM,5%,2W,AA,TP,4X12MM	
R822	2001-001125	R-CARBON(S);300KOHM,5%,1/2W,AA	
R825	2001-001088	R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4X6.4	
R826	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R827	2001-001134	R-CARBON(S);360OHM,5%,1/2W,AA,TP,2.4X6.4	
R828	2001-000117	R-CARBON(S);68ohm,5%,1/2W,AA,TP,2.4x6.4m	
R829	2001-001134	R-CARBON(S);360OHM,5%,1/2W,AA,TP,2.4X6.4	
R830	2001-001139	R-CARBON(S);39KOHM,5%,1/2W,AA,	
R854	2004-001983	R-METAL;2.49KOHM,1%,1/2W,AA,TP,2.4X6.4	
R901	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP	
R902	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R903	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R904	2001-001062	R-CARBON(S);10MOHM,5%,1/2W,AA,	
R905	2001-000397	R-CARBON;180KOHM,5%,1/8W,AA,TP	
R906	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R907	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R908	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
R909	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
R910	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R911	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R912	2001-000723	R-CARBON;4.3KOHM,5%,1/8W,AA,TP	
R913	2001-000723	R-CARBON;4.3KOHM,5%,1/8W,AA,TP	
R914	2001-000723	R-CARBON;4.3KOHM,5%,1/8W,AA,TP	
R915	2001-000869	R-CARBON;56OHM,5%,1/8W,AA,TP,1	
R916	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R917	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R920	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
R921	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R922	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R923	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R924	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
R925	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
R926	2001-000773	R-CARBON;470KOHM,5%,1/8W,AA,TP	
R927	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R928	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R929	2004-001089	R-METAL;560KOHM,5%,1/8W,AA,TP,	
R930	2001-000006	R-CARBON;2.4Kohm,5%,1/8W,AA,TP,1.8x3.2m	
R931	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R932	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	

Loc. No.	Code No.	Description ; Specification	Remark
R932A	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
R933	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
R934	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
R935	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP	
R936	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RH01	2002-001006	R-COMPOSITION;RC1/2T4.7KK/ERC-	
RH02	2002-001006	R-COMPOSITION;RC1/2T4.7KK/ERC-	
RLU01	3501-001040	RELAYPOWER;12VDC,500MW,10A,1FO	
RP801A	1404-000208	POSISTOR;PTH631D02BF7ROM140TDE	
RX01	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
RX02	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,	
RX03	2004-001397	R-METAL(S);4.7KOHM,1%,1/2W,AA,	
RX04	2004-001376	R-METAL(S);11KOHM,1%,1/2W,AA,T	
RX05	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
RX08	2001-000837	R-CARBON;51KOHM,5%,1/8W,AA,TP,	
SC	AA63-00075A	SHIELD-CASE;SECC,T0.6,TS-DECK,ALL,V15A.	
SC+HC	6002-000510	SCREW-TAPPING;RH,+,2,M3,L8,ZPC	
SF101	2904-000304	FILTER-SAW;M1859MNTSC/USAVIFST	
T401	AA26-50001B	HORIZ.DRIVE;-,7.1MH,102UH,10-2	
⚠ T444	AA26-30001Y	TRANS-FRYBACK;-,FSV-20A001,20,125V	
⚠ T801	AA26-20007U	TRANS-SWITCHING;-,90~260V,125V/16.5V/9.5	
TU01	AA40-10005T	TUNER-F/S;TECC1070PG26A(S),NTS	
⚠ V999	3704-001105	SOCKET-CRT;11P,20PI,26.5PI,NI,-	
X201	2801-000226	CRYSTAL-UNIT;3.579545MHZ,20PPM	
X202	2802-000172	RESONATOR-CERAMIC;503.5KHZ,0.5	
X901	2801-003224	CRYSTAL-UNIT;32.768KHZ,20PPM,2	
Z201	2903-001022	FILTER-CERAMIC;TR,4.5MHZ	
Z601	2903-000135	FILTER-CERAMIC;BP,4.5MHZ	

ASSY-CABINET,FRONT

	*AA92-00002L	ASSY-CABINET,FRONT;TT20A5,MEX,V15A,19	
A/SPK	AA96-10007A	ASSY-SPEAKER;-,8OHM,3W,O5F14BRA,-,L300	
AC+BC	AA65-30008A	CLAMP-CORD;-,PE,HB,BLK,-,-	
ACCERY	0203-000368	TAPE-OPPMASKING;#370,-,W50,L50,CLR	
AV+CF	6003-000333	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	
B/C	AA64-00056B	CABINET-BACK;-,TT20A5,-,HIPS,HB,BLK,-	
BACK	AA63-60001L	SPACER-FELT;-,FELT,T0.35,-,150X15,-	
BADGE	AA64-70010D	BADGE-BRAND;-,AL,-,L50,GOLD,R2	
BXTAPE	L9200-0005	TAPE;TRANSPARENT,3X1000YDS,3M371,914mts	
CB+CF	6002-000514	SCREW-TAPPING;RH,+,2,M4,L15,ZP	
CB+FD	6002-000514	SCREW-TAPPING;RH,+,2,M4,L15,ZP	
CDCOIL	L9400-0001	HOLDER-DEGAUSSING;25POLYVINYLCHLORIDEFL	
CP	AA64-00049B	CONTROL-PANEL;HIPS,HB,BLK,PA100,TT20A54	
CRT+CF	AA60-10050R	SCREW-ASSY;WC,HH,+M5,L31.5,SWR	
CWIRE1	AA65-30018A	CLAMP-WIRE;-,NYLON6.6,-,-,DATL	
D-COIL	AA27-20004B	COIL-DEGAUSSING;-,20,5.7ohm,30T,L2170,E	
F/C	AA64-00025A	ASSY-FRONT;HIPS,HB,BLK,PA100,TT20A5,LA	
F/C	AA64-00025C	CABINET-FRONT;HIPS,HB,BLK,TT20A5.	
FBT	AA65-30109A	CLAMP-FBT;NYLON-66,V2,BLK,-,-,-	
IL	AA64-00012A	INDICATOR-LED;-,TT13/19A52,-,PC,-,CLEAR.	
IL + CF	6003-000333	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	
KF	AA64-00011D	KNOB-FAMILY;-,TT14/20A5,PA100,ABS,HB,BLK	
KF+ CF	6002-000512	SCREW-TAPPING;RH,+,2,M4,L12,ZP	
L/SPK	AA39-20500G	LEAD CONNECTOR-ASSY;-,67096-003,REC,3(2)	
SPK	3001-000189	SPEAKER;3W,8OHM,85DB,180HZ	
SPK+CF	6003-000333	SCREW-TAPTITE;RH,+,2S,M3,L10,ZPC(YEL),SW	
STAPLE	AA60-40006A	PIN-STAPLE;-,-,-,H18,33X17.8X2	
WR	AA64-00018A	WINDOW-REMOCON;-,TT13/19A52,-,PC,VIOLET.	

ASSY-CRT

	* AA94-50019X	ASSY-CRT;A48KRD82X(H),+380MG,20,BARE,-	
C-Y	AA27-60001D	MAGNET-CONVERGENCE;-,JH-291-(J	
⚠ CRT	AA03-10029W	CRT-COLOR;A48KRD82X(H),+380MG,SEMI-TINT.	
D-Y	AA27-50004W	D-Y;20,HI-TRON CRT	
SPACER	AA63-60028A	SPACER-DY;-,NEOPRENE,-,BLK,V0W	

ASSY-M/DECK

	* AA94-80004K	ASSY-M/DECK;M-420N/SER.31,4HD,NTSC,-,TS	
A/CFT	LA63-00006A	ASSY-COVER/FRAME,TOP;CVR/FR+SHIELD-PLATE	
A/DECK	AA91-40124A	ASSY-DECK;-,4HD,NTSC,X-9,DLCMEXICO	
A/FRME	AA90-40008B	ASSY-FRAME;SAMEX,CKD,TVN502V	
A/PCB-M/DECK	AA96-80003H	ASSY-PCB,M/DECK;M-440N,4HD,NTSC,W/KEY	
BDM602	3301-000287	CORE-FERRITEBEAD;AA,3.5X1.0X6.	
BDM603	3301-000287	CORE-FERRITEBEAD;AA,3.5X1.0X6.	
CFT+FD	6002-000507	SCREW-TAPPING;RH,+,2,M3,L12,ZP	
CM102	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM103	2401-000480	C-AL;10UF,20%,50V,GP,5X11MM,5M	
CM105	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM106	2401-000553	C-AL;1UF,10%,50V,GP,5X11MM,5MM	
CM107	2401-000553	C-AL;1UF,10%,50V,GP,5X11MM,5MM	
CM110	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM111	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM112	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM113	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM114	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM115	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM209	2202-000830	C-CERAMIC,MLC-AXIAL;82PF,10%,5	
CM211	2202-000830	C-CERAMIC,MLC-AXIAL;82PF,10%,5	
CM212	2301-000175	C-FILM,PEF;15NF,5%,50V,7.1X3.5	
CM213	2401-000030	C-ALUMINUM;22UF,20%,25V,GP,TP,5X11MM,5M	
CM218	2401-000030	C-ALUMINUM;22UF,20%,25V,GP,TP,5X11MM,5M	
CM301	2305-000665	C-FILM;CF922N63VT104-J-40/1053	
CM302	2401-001496	C-AL;47UF,20%,16V,GP,5X7MM,5MM	
CM303	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM304	2201-000499	C-CERAMIC,DISC;390PF,5%,50V,SL,8.0X3.0,2	
CM305	2401-001250	C-AL;4.7uF,20%,35V,GP,TP,4x5,5	
CM307	2201-000345	C-CERAMIC,DISC;200pF,5%,50V,SL,TP,6.3*3,	
CM308	2301-000175	C-FILM,PEF;15NF,5%,50V,7.1X3.5	
CM309	2401-001363	C-AL;470UF,20%,16V,GP,TP,10X12	
CM310	2401-000922	C-AL;22uF,20%,16V,GP,TP,5x5,5	
CM311	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM312	2301-000224	C-FILM,PEF;22NF,5%,50V,7.4X3.9	
CM313	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM314	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
CM315	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
CM316	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM317	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM318	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
CM319	2202-000286	C-CERAMIC,MLC-AXIAL;56PF,5%,50	
CM320	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
CM321	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM322	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM323	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
CM324	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5	
CM325	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM326	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM327	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM328	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM329	2202-000819	C-CERAMIC,MLC-AXIAL;47NF,+80-2	
CM330	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM331	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM332	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM333	2401-002235	C-ELECTROLYTIC;CE04W(T)16V10M	
CM334	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM335	2301-000356	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5m	
CM336	2301-000356	C-FILM,PEF;47nF,5%,50V,TP,7.5x4.0x6.5,5m	
CM337	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM338	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM340	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM341	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM342	2401-001537	C-AL;47UF,20%,25V,GP,6.3X7MM,5	
CM343	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM344	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM345	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM346	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5	
CM347	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM348	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM349	2001-000539	R-CARBON;24KOHM,5%,1/8W,AA,TP,	
CM350	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM351	2201-000483	C-CERAMIC,DISC;33PF,5%,50V,NPO	

Loc. No.	Code No.	Description ; Specification	Remark
CM501	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM502	2401-002462	C-ELECTROLYTIC;CE04WTAPG16V33M	
CM503	2401-000914	C-AL;22UF,20%,16V,GP,5X11,5,TP	
CM504	2401-001537	C-AL;47UF,20%,25V,GP,6.3X7MM,5	
CM505	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM506	2301-000192	C-FILM,PEF;1NF,5%,50V,5.3X10MM	
CM507	2301-000342	C-FILM,PEF;2.2nF,5%,50V,TP,7.4x3.9x13mm,	
CM508	2401-000027	C-AL;4.7UF,20%,50V,GP,5*11MM,5MEA	
CM509	2401-000455	C-AL;10uF,20%,35V,GP,TP,4x7mm,5mm	
CM510	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
CM512	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM513	2301-000224	C-FILM,PEF;22NF,5%,50V,7.4X3.9	
CM514	2401-002299	C-AL;4.7UF,20%,50V,GP,TP,4X7,5	
CM515	2301-000301	C-FILM,PEF;6.8NF,5%,50V,6.5X5.	
CM516	2301-000314	C-FILM,PEF;8.2NF,5%,50V,6.5X3.	
CM517	2301-000301	C-FILM,PEF;6.8NF,5%,50V,6.5X5.	
CM518	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
CM519	2301-000383	C-FILM,PEF;10nF,5%,50V,TP,6x7x3.2mm,5mm	
CM520	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM521	2301-000254	C-FILM,PEF;39NF,5%,50V,7.5X3.5X6.5MM,5MM	
CM523	2305-000665	C-FILM;CF922N63VT104-J-40/1053	
CM524	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM603	2401-000603	C-AL;1UF,20%,50V,GP,5X11MM,5MM	
CM604	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM605	2202-000295	C-CERAMIC,MLC-AXIAL;68PF,5%,50	
CM608	2202-000295	C-CERAMIC,MLC-AXIAL;68PF,5%,50	
CM611	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM612	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM613	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM614	2401-001496	C-AL;47UF,20%,16V,GP,5X7MM,5MM	
CM617	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM618	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM620	2202-000222	C-CERAMIC,MLC-AXIAL;3.3NF,20%,16V,Y5P,7	
CM621	2202-002019	C-CERAMIC,MLC-AXIAL;68NF,10%,5	
CM622	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM629	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM630	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM631	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50	
CM632	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50	
CM633	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50	
CM634	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50	
CM636	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM637	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM638	2202-000719	C-CERAMIC,MLC-AXIAL;6.8nF,20%,16V,Y5R,TP	
CM639	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM640	2401-000455	C-AL;10uF,20%,35V,GP,TP,4x7mm,5mm	
CM641	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM643	2401-001250	C-AL;4.7uF,20%,35V,GP,TP,4x5,5	
CM644	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM645	2202-002019	C-CERAMIC,MLC-AXIAL;68NF,10%,5	
CM646	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM648	2301-000224	C-FILM,PEF;22NF,5%,50V,7.4X3.9	
CM649	2401-001537	C-AL;47UF,20%,25V,GP,6.3X7MM,5	
CM650	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM652	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM653	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM654	2401-002619	C-AL;47uF,20%,25V,GP,TP,5x11,5	
CM655	2202-000127	C-CERAMIC,MLC-AXIAL;10NF,+80-2	
CM656	2401-000302	C-AL;100UF,20%,25V,GP,6X11MM,5	
CM657	2401-000302	C-AL;100UF,20%,25V,GP,6X11MM,5	
CM701	2202-002037	C-CERAMIC,MLC-AXIAL;100NF,+80-20	
CM702	2401-002009	C-AL;100UF,20%,16V,GP,TP,6.3X7	
CNM001	AA39-20159D	LEAD CONNECTOR-ASSY;-,YBNH025-12,67096-1	
CNM301	3708-000395	CONNECTOR-FPC/FC/PIC;8P,1.25MM	
CNM501	3708-001053	CONNECTOR-FPC/FC/PIC;7P,1.2MM,	
CNM502	3710-000405	CONNECTOR-SOCKET;2P,2R,2.5MM,-	
CNM601	AA39-20603A	LEAD CONNECTOR-ASSY;-,GIL-S-2S-S2C2-S,YB	
CNM602	3711-003749	CONNECTOR-HEADER;BOX,8P,2R,2mm,STRAIGHT,	
CNM604	3708-001131	CONNECTOR-FPC/FC/PIC;5P,1.25mm,STRAIGHT,	
CNM605	AA39-20071D	LEAD-CONNECTOR,ASSY;-,YBNH025-12,67096-0	
COVER	AA63-00006A	FRAME,TOP;-,TVN-502V,T0.5,SECC,-,	
DE+FD	6002-000522	SCREW-TAPPING;TH,+,2,M4,L15,ZP	
DM101	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM102	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM103	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM104	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM105	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	

Loc. No.	Code No.	Description ; Specification	Remark
DM106	0401-000005	DIODE;1N4148TAPG	
DM301	0401-000005	DIODE;1N4148TAPG	
DM302	0401-000005	DIODE;1N4148TAPG	
DM610	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM611	0401-000005	DIODE;1N4148TAPG	
DM612	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM613	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM614	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM619	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM620	0401-000005	DIODE;1N4148TAPG	
DM622	0402-000132	DIODE-RECTIFIER;1N4004,400V,1A,DO-41	
DM701	0401-000005	DIODE;1N4148TAPG	
DOOR/H	AA64-00024R	DOOR-HOUSING;4HD,ABS,HB,BLK,20A54(LATIN)	
FD	AA61-00004A	FRAME-DECK;-,TVN-502V,-,V2,-,BLK,-,-,-,-	
FD+PCB	6002-000507	SCREW-TAPPING;RH,+,2,M3,L12,ZP	
FLM501	AA26-10006C	TRANS-IF;7ML,BIAS,-,7MM,3100PF	
GPM001	AA63-40311A	GROUND-PLATE,PCB;-,PBS,T0.3,TVN334V,-	
⚠ICM101	1203-000298	IC-POSI.FIXEDREG.;7809,TO-220,	H/SINK
⚠ICM102	1203-000243	IC-POSI.FIXEDREG.;7812,TO-220,	
⚠ICM301	1204-001495	IC-VIDEO PROCESS;LA71074M,QFP,100P,-,PLA	
⚠ICM601	AA13-00014A	IC-MCU;-,HD6433977RB71F,8BIT,QFP,TVN5	
⚠ICM603	1003-001162	IC-MOTORDRIVER;KA3082,SIP,10PIN,25MIL,D	
⚠ICM605	1203-000642	IC-RESET;572,TO-92,3P,-,PLASTI	
LDM601	AA91-60317A	ASSY-GUIDE,LED;-,ABS,V0,BLK,RED LED 03,T	
LDM602	AA91-60318A	ASSY-HOLDER,LED;-,ABS,HB,BLK,IR LED,TS-D	
LM101	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
LM301	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
LM302	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
LM303	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
LM304	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
LM501	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
LM502	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
LM503	2702-000120	INDUCTOR-RADIAL;15MH,5%,6.2X7.	
LM504	2701-000180	INDUCTOR-AXIAL;33UH,5%,2.5X3.4	
LM601	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
LM602	2701-000002	INDUCTOR-AXIAL;100UH,10%,4.2X9	
OOVER	AA41-10982A	PCB-VIDEO;V15A,1L,FR-1,330x245x1.6T,A1,-	
PTM601	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,	
PTM602	0604-001122	PHOTO-INTERRUPTER;TR,0.065%,150mW,DIP-4,	
QM101	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,2	
QM102	0501-000316	TR-SMALLSIGNAL;KSA928A-Y,PNP,1	
QM103	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,2	
QM104	0501-000316	TR-SMALLSIGNAL;KSA928A-Y,PNP,1	
QM106	0501-000362	TRANSISTOR;KSC2328A-Y/2SC2655-	
QM301	0501-000303	TR-SMALLSIGNAL;KSA733,PNP,250M	
QM302	0501-000398	TR-SMALLSIGNAL;KSC945,NPN,60V,	
QM303	0501-000303	TR-SMALLSIGNAL;KSA733,PNP,250M	
QM304	0501-000398	TR-SMALLSIGNAL;KSC945,NPN,60V,	
QM305	0501-000398	TR-SMALLSIGNAL;KSC945,NPN,60V,	
QM306	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,4	
QM307	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4	
QM308	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,4	
QM501	0501-000303	TR-SMALLSIGNAL;KSA733,PNP,250M	
QM502	0501-000010	TR-SMALLSIGNAL;KSC1008,NPN,80V	
QM503	0501-000303	TR-SMALLSIGNAL;KSA733,PNP,250M	
QM504	0501-000231	TR-SMALLSIGNAL;2SD1468SQ,NPN,3	
QM505	0501-000231	TR-SMALLSIGNAL;2SD1468SQ,NPN,3	
QM601	0504-000119	TR-DIGITAL;KSR1004,NPN,300MW,4	
QM602	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4	
QM701	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,2	
QM702	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,2	
QM703	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,2	
REM701	AA59-60003V	MODULE-REMOCON;DP,SRV-18,38KHz,940nm,MES	
RM101	2001-001088	R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4X6.4	
RM102	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP	
RM103	2001-001122	R-CARBON/METALFILM;RD1/2T3.9K-	
RM104	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP	
RM105	2008-001047	R-FUSIBLE(S);68ohm,5%,2W,AF,TP,3.9x10mm	
RM106	2001-001107	R-CARBON(S);220OHM,5%,1/2W,AA,	
RM108	2008-000290	R-FUSIBLE;2.4OHM,5%,2W,AF,TP,3	
RM109	2008-001015	R-FUSIBLE;1.50HM,5%2WAF,TP39X10	
RM301	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
RM302	2001-000577	R-CARBON;2KOHM,5%,1/8W,AA,TP,1	
RM303	2001-000723	R-CARBON;4.3KOHM,5%,1/8W,AA,TP	
RM304	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP	
RM305	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,	
RM306	2001-001108	R-CARBON(S);22KOHM,5%,1/2W,AA,	

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RM307	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM308	2001-001114	R-CARBON(S);270OHM,5%,1/2W,AA,	
RM309	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1	
RM310	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,	
RM311	2001-000977	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM312	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
RM314	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1	
RM315	2001-000977	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM317	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
RM318	2001-000989	R-METAL;820Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM319	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,	
RM320	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP	
RM321	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP	
RM322	2001-000258	R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM323	2001-000977	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM324	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM326	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP	
RM327	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP	
RM328	2001-000800	R-CARBON;5.1KOHM,5%,1/8W,AA,TP	
RM329	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,	
RM330	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,	
RM331	2001-000633	R-CARBON;30KOHM,5%,1/8W,AA,TP,	
RM332	2001-000947	R-CARBON;7.5KOHM,5%,1/8W,AA,TP	
RM333	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM334	2001-000832	R-CARBON;510OHM,5%,1/8W,AA,TP,	
RM335	2001-000832	R-CARBON;510OHM,5%,1/8W,AA,TP,	
RM336	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP	
RM337	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
RM338	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,	
RM339	2001-000837	R-CARBON;51KOHM,5%,1/8W,AA,TP,	
RM340	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM342	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM501	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM502	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
RM505	2001-000454	R-CARBON;2.2MOHM,5%,1/8W,AA,TP	
RM506	2001-000232	R-CARBON;1.3KOHM,5%,1/8W,AA,TP	
RM507	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,	
RM508	2001-000325	R-CARBON;120OHM,5%,1/8W,AA,TP,	
RM509	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM510	2004-001989	R-METAL;620OHM,5%,1/8W,AA,TP,1	
RM511	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP	
RM512	2001-000977	R-CARBON;8.2Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM513	2001-000331	R-CARBON;12KOHM,5%,1/8W,AA,TP,	
RM514	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP	
RM516	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
RM517	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM518	2001-000458	R-CARBON;2.2ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM519	2001-000258	R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m	
RM520	2001-000780	R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM521	2001-000405	R-CARBON;180OHM,5%,1/8W,AA,TP,	
RM522	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM523	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
RM524	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM527	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,	
RM528	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM529	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,	
RM530	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM531	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM532	2001-000645	R-CARBON;330KOHM,5%,1/8W,AA,TP	
RM533	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM534	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM601	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM602	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,	
RM603	2001-000435	R-CARBON;1MOHM,5%,1/8W,AA,TP,1	
RM604	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
RM605	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM606	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP	
RM607	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM608	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,	
RM609	2003-002129	R-METALOXIDE(S);3.9ohm,5%,2W,AF,TP,3.9x	
RM610	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM612	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM613	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM614	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM615	2001-000435	R-CARBON;1MOHM,5%,1/8W,AA,TP,1	
RM616	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM617	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM618	2004-001185	R-METAL;680KOHM,5%,1/8W,AA,TP,	
RM621	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM623	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM633	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM634	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM636	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM638	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
RM639	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM640	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM641	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM642	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM643	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM644	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
RM645	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
RM646	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP	
RM648	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP	
RM650	2001-000633	R-CARBON;30KOHM,5%,1/8W,AA,TP,	
RM662	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM663	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM664	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM666	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM667	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM668	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM670	2001-001035	R-METAL;91ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM671	2001-001035	R-METAL;91ohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM672	2001-000405	R-CARBON;180OHM,5%,1/8W,AA,TP,	
RM673	2001-000534	R-CARBON;240OHM,5%,1/8W,AA,TP,	
RM674	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP	
RM676	2001-000864	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM677	2001-000864	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM678	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
RM679	2001-000837	R-CARBON;51KOHM,5%,1/8W,AA,TP,	
RM680	2001-000534	R-CARBON;240OHM,5%,1/8W,AA,TP,	
RM681	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
RM682	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,	
RM683	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM684	2001-000837	R-CARBON;51KOHM,5%,1/8W,AA,TP,	
RM685	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM686	2001-000864	R-CARBON;56Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM687	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,	
RM688	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM689	2001-000010	R-CARBON;68Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM690	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM691	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM692	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM693	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM694	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM695	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM696	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM697	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM699	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
RM701	2001-001077	R-CARBON(S);150OHM,5%,1/2W,AA,	
RM702	2001-001077	R-CARBON(S);150OHM,5%,1/2W,AA,	
RM703	2001-001077	R-CARBON(S);150OHM,5%,1/2W,AA,	
SB	AA63-40313A	SHIELD-BOTTOM;-,SPTE,T0.5,-,TVN334V	
SM601	AA91-60319A	ASSY-HOLDER,SENSOR;-,ABS,HB,BLK,TR LED,T	
SM602	AA91-60319A	ASSY-HOLDER,SENSOR;-,ABS,HB,BLK,TR LED,T	
SPLATE	AA63-40301A	SHIELD-PLATE;STEEL PLATE S30 T0.5	
SPRING	AA61-00050A	SPRING-DOOR;-,SUS304,0.5,OD6,H9.7,N8,-,T	
SWM601	AA34-20001A	SWITCH-MODE;1,25x14.6x29.8mm,BK,DC5V	
SWM602	AA34-40001A	SWITCH-REC.;1EA,37.5x14.4mm,BK,DC5V	
SWM701	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
SWM702	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
SWM703	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
SWM704	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
SWM705	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
SWM706	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
SWM707	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
SWM708	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
SWM709	3404-000244	SWITCH-TACT;15V,20MA,90-170GF,	
VRM601	2103-000669	VR-SEMI;NVZ6TLTA10KB10KBCERMET	
XTM301	2801-003610	CRISTAL-UNIT 3.57MHZ	
XTM601	2801-003293	CRYSTAL-UNIT;10MHZ,50PPM,28-AA	
XTM602	2801-003224	CRYSTAL-UNIT;32.768KHZ,20PPM,2	
ZDM102	0403-000355	DIODEZENER;UZ5.1BSB,4.97~5.17V,0.5UA,500	
ZDM701	0403-000654	DIODE-ZENER;MTZ12,12V,11.4-12.	

Loc. No.	Code No.	Description ; Specification	Remark

Loc. No.	Code No.	Description ; Specification	Remark

ASSY-PCB,A/V

	* LA95-40005S	ASSY-PCB,A/V;-,KCV13A,V15A,13,19	
05VER	AA41-10290F	PCB-A/V;KH1,1L,FR-1,227x50.5x1.6T,-,-	
CV602	3711-002645	POST-HEADER;67094-006(AUTO)	
CV602	AA39-20027A	LEAD-CONNECTOR,ASSY;-,67096-006,S,6P,300	
JA01	3722-000171	JACK-RCA;1P,3.4MM,-,AU	
JA02	3722-000180	JACK-RCA;1P,3.4MM,-,SN	
JE01	3722-000145	JACK-PHONE;1P,3.6MM,-,MBAG	
R605	2001-001187	R-CARBON(S);75OHM,5%,1/2W,AA,T	
R606	2001-001187	R-CARBON(S);75OHM,5%,1/2W,AA,T	

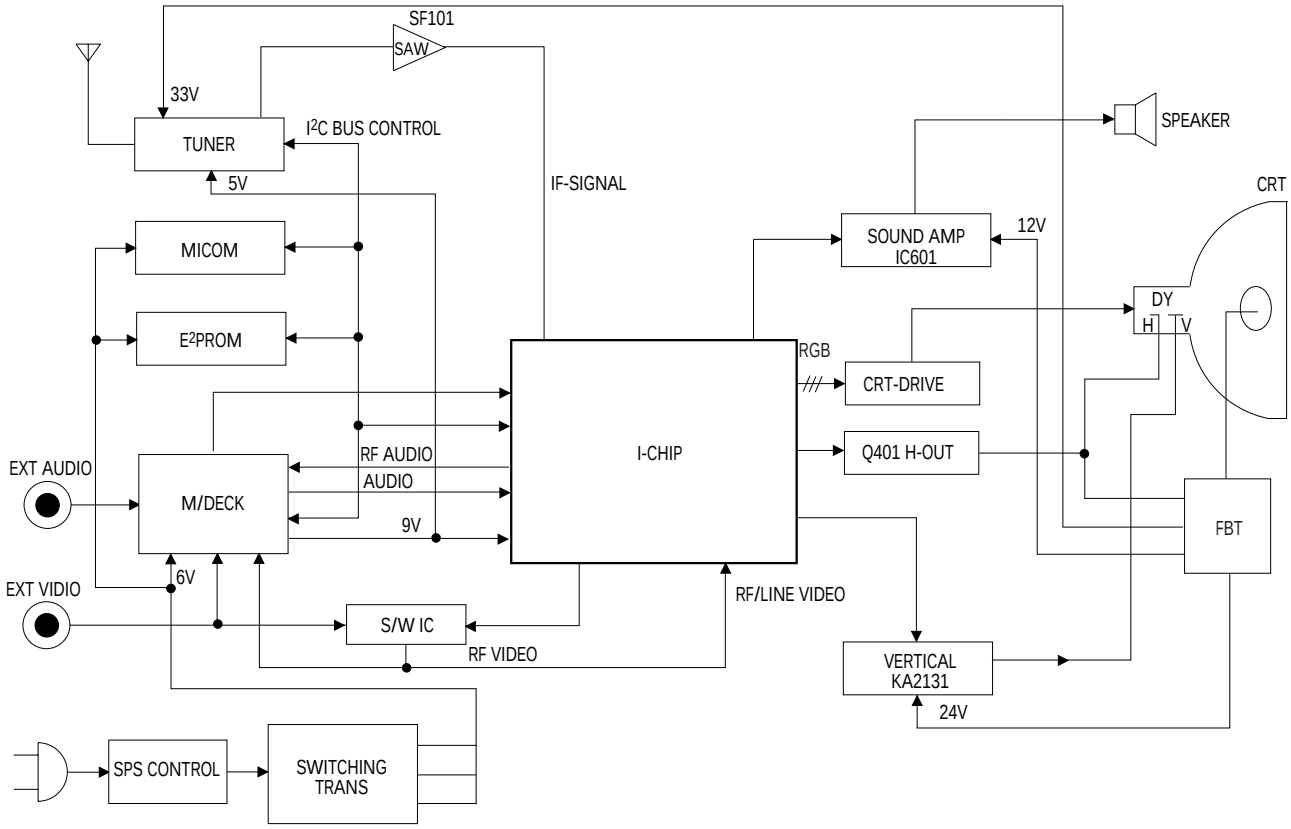
ASSY-ACCESSORY

	* AA97-20032F	ASSY-ACCESSORY;V15A,MEX,TVI TVCR	
A/ROD	L7000-0130	ANT-RODVHF;4SDODIPOLE500MMBRN	
BATT	4301-000121	BATTERY-MN;1.5V,-,AAA,10.5X44.	
CR-MUL	31499-009-120	CR-MULTIPLE;MED-C271,R1-2M	
I/B	AA68-00010A	MANUAL-USERS;V15A,SPA,TM46,-,W/P100(G),	
PATCH	AA39-40001F	CABLE-RCA;-,RCA,150MM,0.12/10,	
T/MATC	L2759-115-050	TRANS-MATCHING;R300-R75CSA	
T/REG	L6000-0082-020	TARJETADEREGISTRO;8.5X11,80GL,MEX	

REMOCON

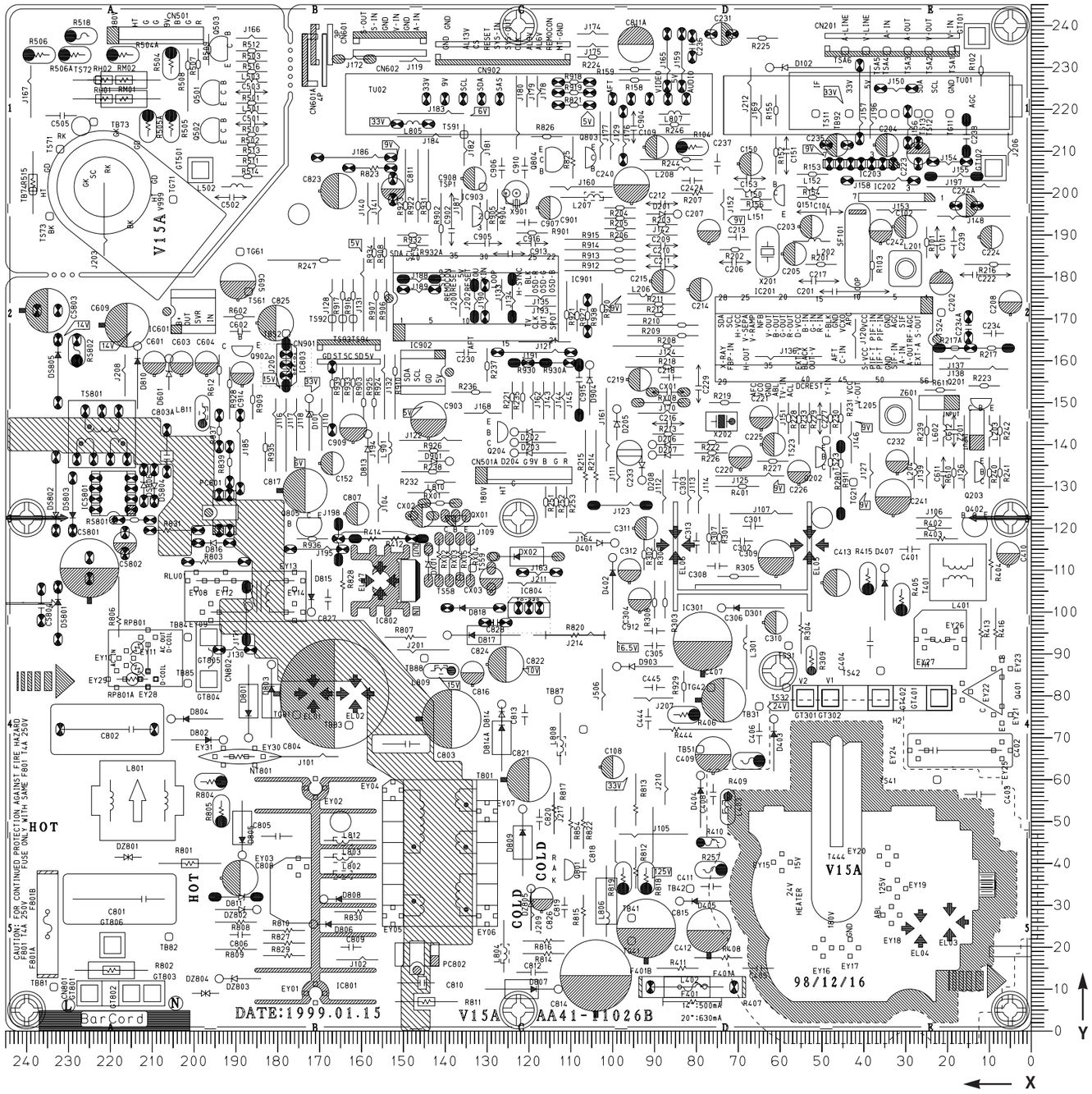
	* AA59-10026Q	REMOCON;-,TM46,SS,SZM644E,39,4HD,-,L/G	

9. Block Diagram



11. PCB Layout

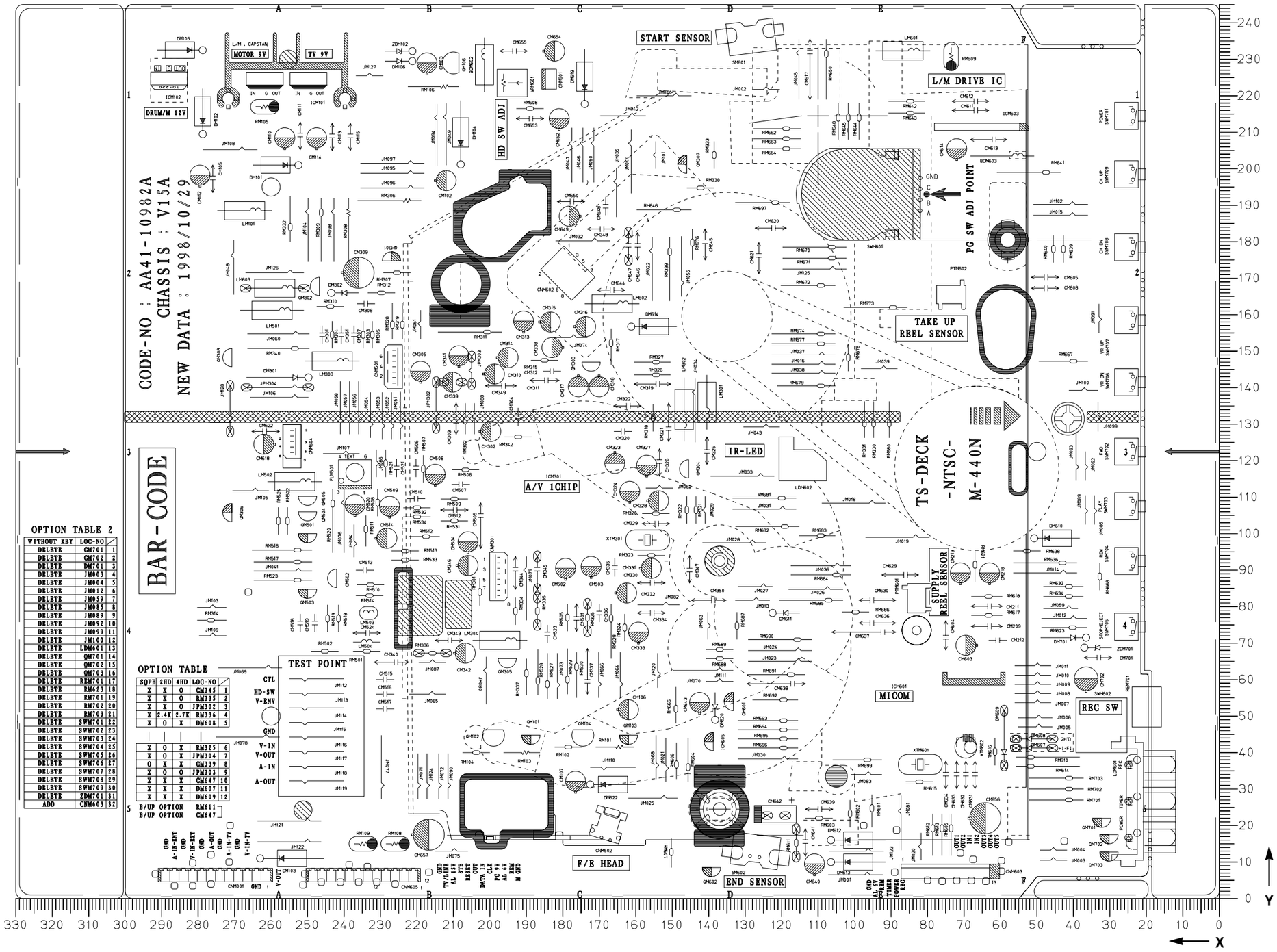
11-1 TV Main



Loc. No.	X	Y
DIODE		
D101	172	151
D102	62	230
D201	84	195
D202	123	143
D203	123	140
D204	123	138
D205	99	148
D206	90	140
D207	90	137
D208	93	131
D301	74	101
D401	99	116
D402	100	113
D403	61	74
D404	79	61
D405	84	31
D407	35	110
D601	206	160
D801	187	70
D802	193	69
D803	181	87
D804	205	74
D805	188	42
D806	171	25
D807	113	10
D808	169	31
D809	121	53
D810	213	163
D811	185	32
D813	158	142
D814	126	78
D814A	126	78
D815	172	100
D816	199	116
D817	139	94
D818	139	101
D901	139	136
D903	99	87
D904	105	159
DS801	232	106
DS802	233	119
DS803	229	119
DS804	209	126
DS805	232	165
DS806	212	134

Loc. No.	X	Y
DX01	144	115
DX02	128	113
DZ801	212	41
DZ802	185	29
DZ803	194	12
DZ804	193	9
DZ805	119	34
IC		
IC201	25	157
IC202	24	199
IC203	33	207
IC301	53	116
IC601	204	176
IC801	171	9
IC802	155	107
IC803	178	156
IC804	117	101
IC901	150	183
IC902	141	153
IC903	133	192
ICS801	223	124
TRANSISTOR		
Q151	59	202
Q201	14	151
Q202	51	134
Q203	13	131
Q204	127	140
Q401	7	86
Q402	16	121
Q501	195	226
Q502	195	217
Q503	193	237
Q801	111	36
Q803	106	206
Q804	114	205
Q805	175	121
Q902	191	163
QX01	140	123

11-2 Video Main



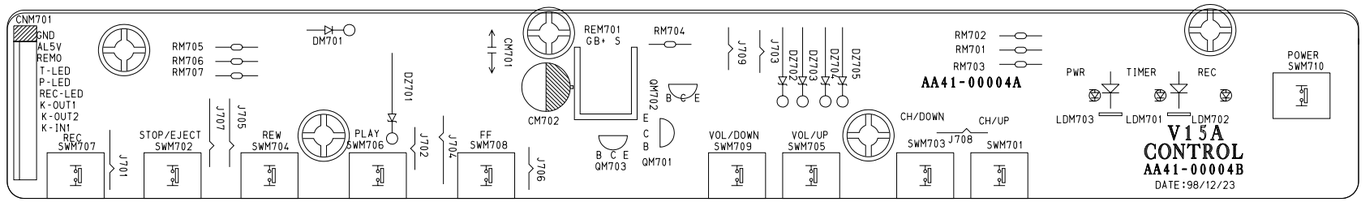
Loc. No.	X	Y
DIODE		
DM101	252	201
DM102	278	209
DM103	263	11
DM104	208	201
DM105	278	232
DM106	221	229
DM301	249	142
DM302	243	166
DM607	55	41
DM608	55	43
DM609	59	36
DM610	50	98
DM611	122	78
DM612	106	16
DM613	106	10
DM614	161	156
DM619	174	217
DM620	138	49
DM622	172	31
DM701	36	71
IC		
ICM101	271	219
ICM102	290	224
ICM301	183	112
ICM601	90	56
ICM603	53	211
ICM605	138	45
TRANSISTOR		
QM101	191	44
QM102	201	44
QM103	164	44
QM104	177	44
QM106	210	231
QM301	224	174
QM302	246	170
QM303	174	147
QM304	145	120
QM305	197	65
QM306	270	108
QM307	146	203
QM308	270	150
QM501	252	100
QM502	242	90
QM503	252	84
QM504	252	106
QM505	252	110
QM601	133	56
QM602	141	8
QM701	34	22
QM702	32	17
QM703	32	12

WITHOUT KEY	LOC-NO	
DELETE	CM701	1
DELETE	CM702	2
DELETE	DM701	3
DELETE	JM003	4
DELETE	JM004	5
DELETE	JM012	6
DELETE	JM659	7
DELETE	JM085	8
DELETE	JM089	9
DELETE	JM092	10
DELETE	JM099	11
DELETE	JM100	12
DELETE	LDM601	13
DELETE	QM701	14
DELETE	QM702	15
DELETE	QM703	16
DELETE	RBM701	17
DELETE	RM623	18
DELETE	RM701	19
DELETE	RM702	20
DELETE	RM703	21
DELETE	SWM701	22
DELETE	SWM702	23
DELETE	SWM703	24
DELETE	SWM704	25
DELETE	SWM705	26
DELETE	SWM706	27
DELETE	SWM707	28
DELETE	SWM708	29
DELETE	SWM709	30
DELETE	ZDM701	31
ADD	CHM603	32

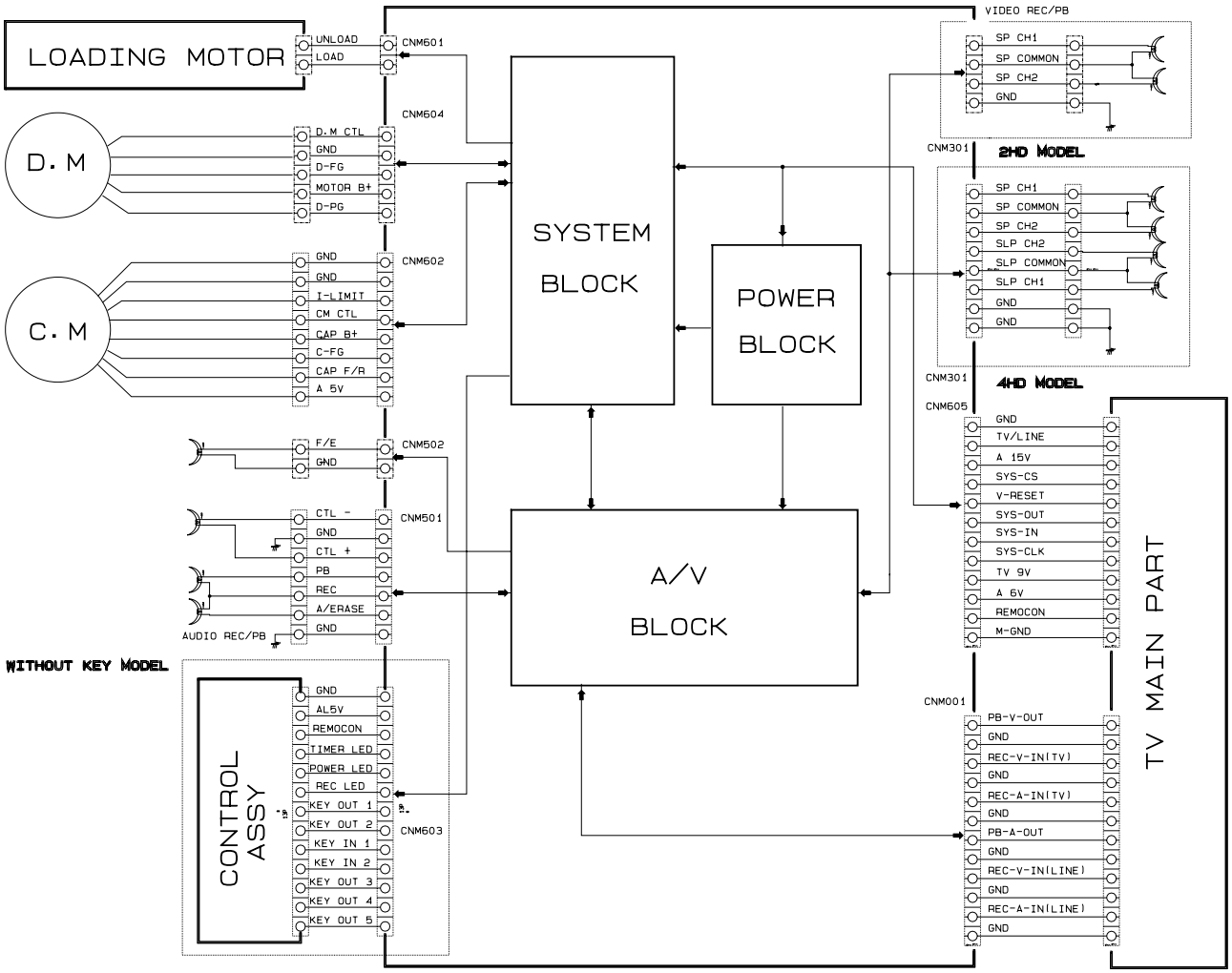
SQPB	2HD	4HD	LOC-NO	
X	X	O	CM345	1
X	X	O	RM335	2
X	X	O	JPM302	3
X	2.4K	2.7K	RM336	4
X	O	X	DM608	5
X	O	X	RM325	6
X	O	X	JPM304	7
O	X	X	CM339	8
X	O	O	JPM303	9
X	X	X	CM647	10
X	X	X	DM607	11
X	X	X	DM609	12

B/UP OPTION RM611
B/UP OPTION CM647

11-3 Main CONTROL



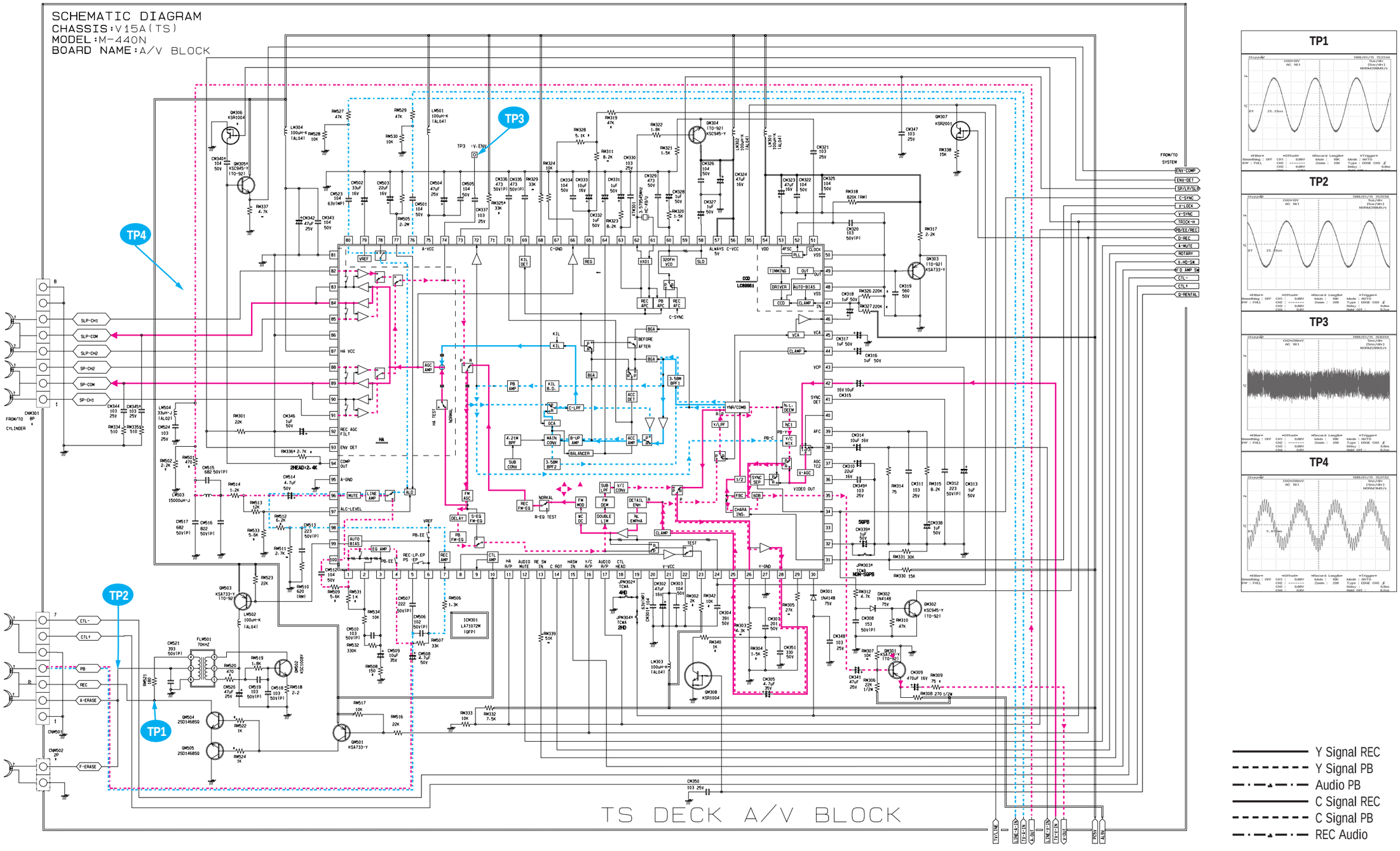
10. Wiring Diagram



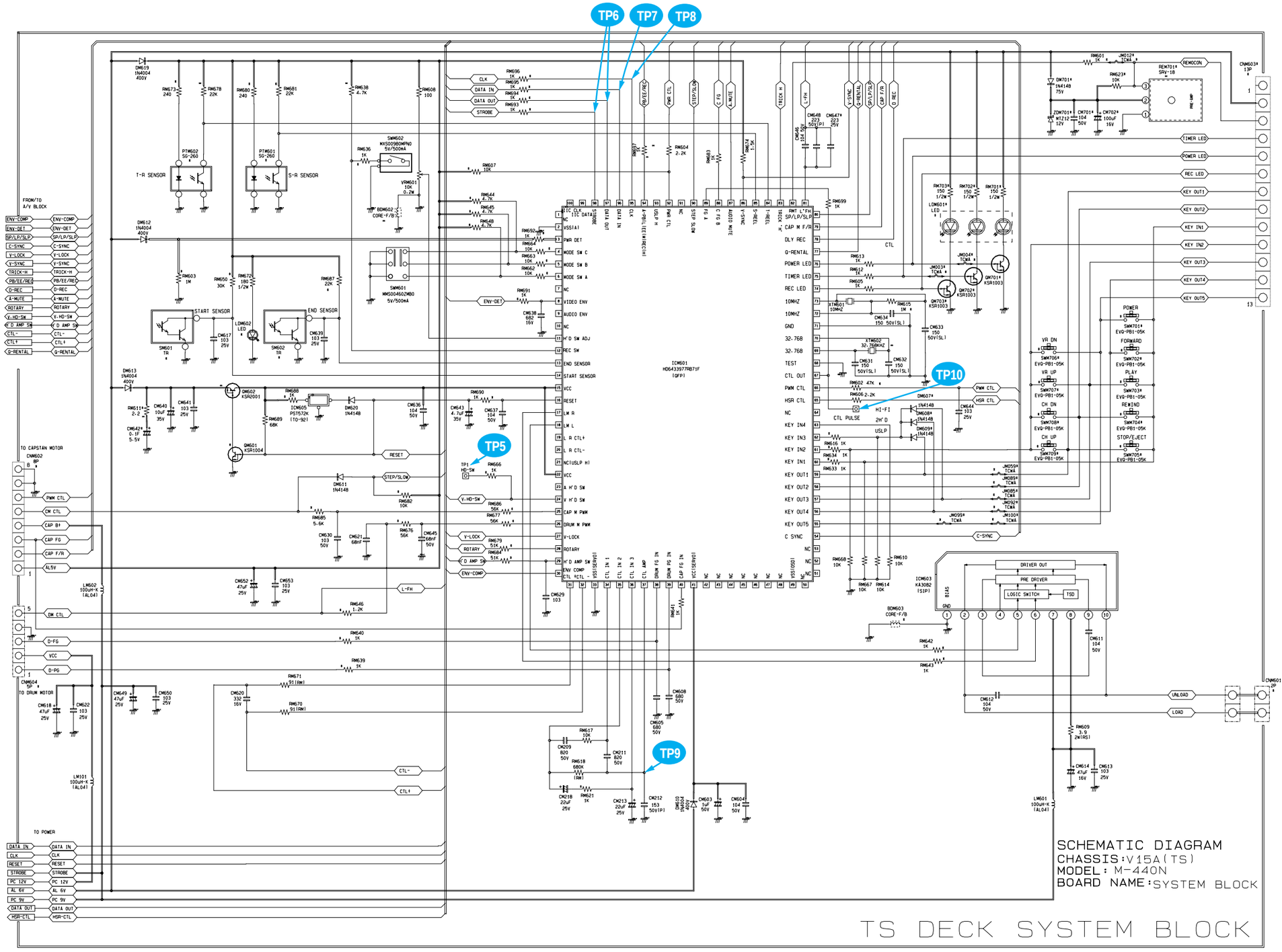
V15A M/DECK BLOCK DIAGRAM

12. Schematic Diagrams

12-1 VCR (AV-BLOCK)



12-2 VCR (SYSTEM BLOCK)



TP5

TP6

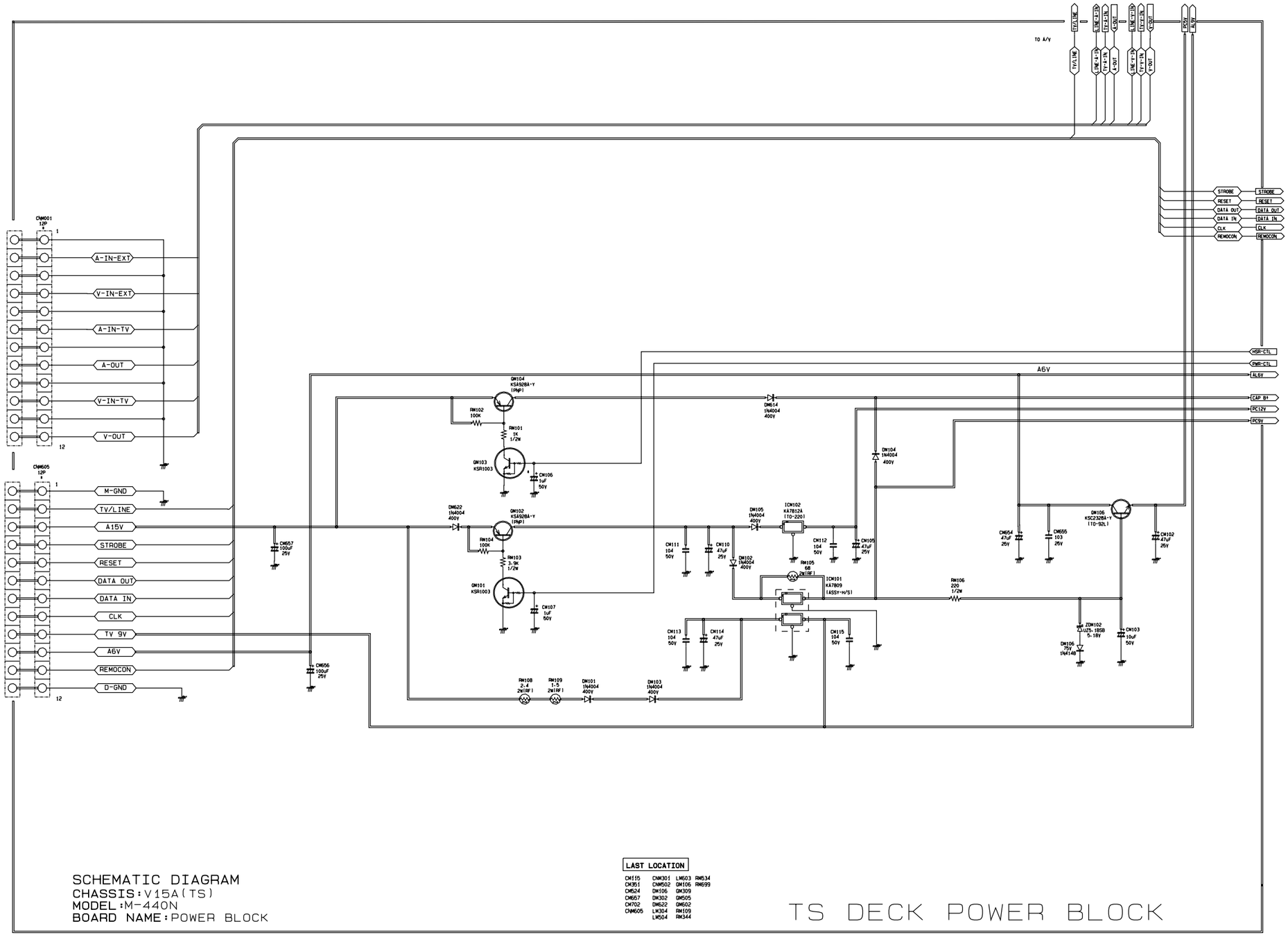
TP7

TP8

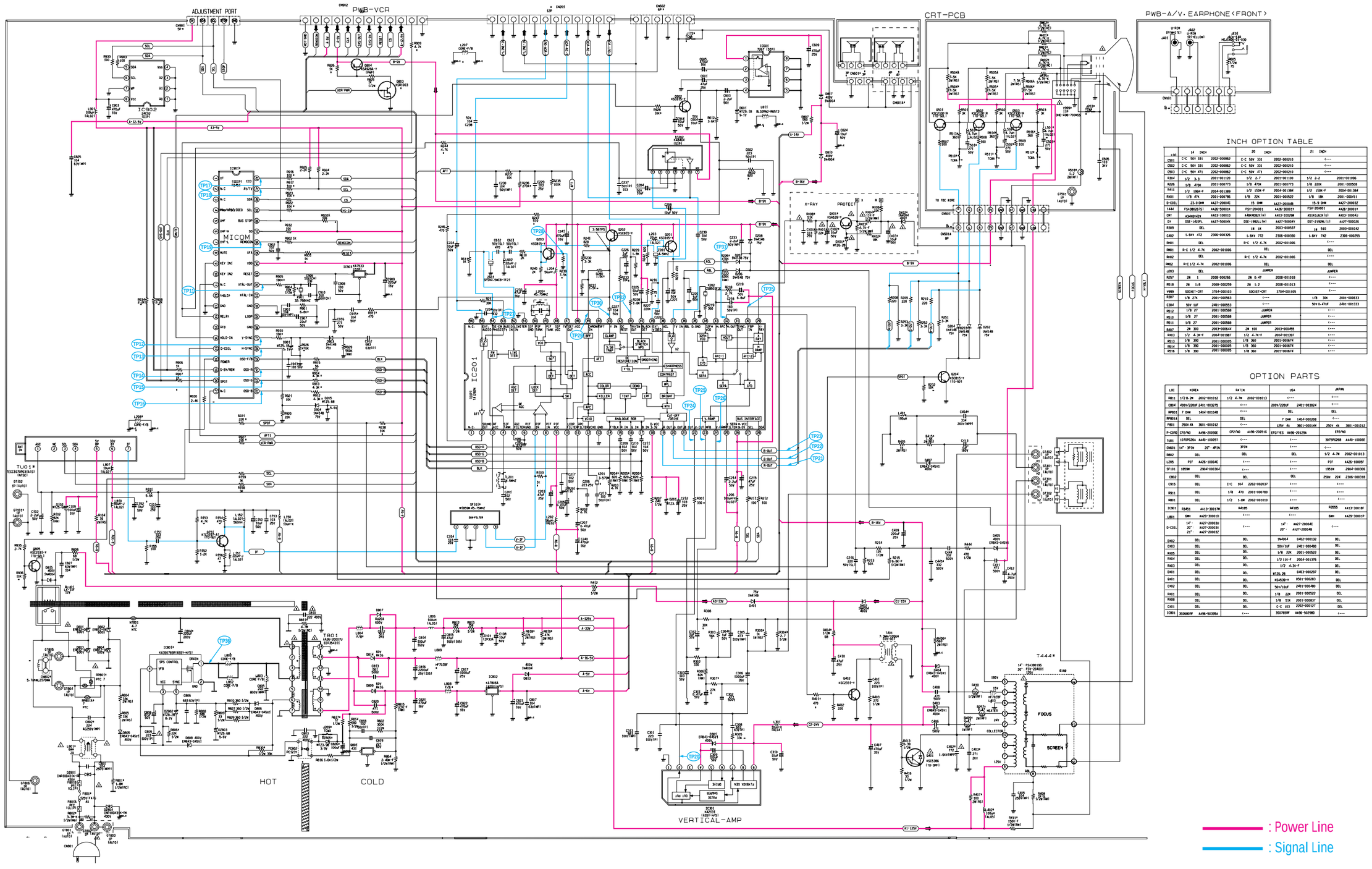
TP9

TP10

12-3 VCR (POWER BLOCK)



12-4 TV (MAIN BLOCK)



INCH OPTION TABLE

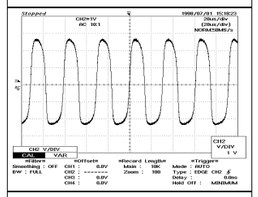
LOC	14 INCH	20 INCH	21 INCH
C501	C-C 50V 331 2202-000862	C-C 50V 331 2202-000210	<----
C502	C-C 50V 331 2202-000862	C-C 50V 331 2202-000210	<----
C503	C-C 50V 471 2202-000862	C-C 50V 471 2202-000210	<----
R364	1/2 3.3 2001-001120	1/2 2.7 2001-001100	1/2 2.2 2001-001096
R206	1/8 470K 2001-000773	1/8 470K 2001-000773	1/8 220K 2001-000508
R411	1/2 180K-F 2004-001384	1/2 150K-F 2004-001384	1/2 150K-F 2004-001384
R401	1/8 47K 2001-000785	1/8 22K 2001-000522	1/8 18K 2001-000411
D-COIL	23-5 OHM AA27-20004C	15 OHM AA27-20004B	15-5 OHM AA27-20003Z
T444	FSA380215! AA26-300314	FSY-204001 AA26-300019	FSY-204001 AA26-300019
CRT	A34SVG2X AA03-100010	A49KRG02X!#! AA03-100298	A51KLG43X!#! AA03-100042
DY	DSE-142CFL AA27-500045	DSE-190ZLL!#! AA27-500049	DST-215ZWL!#! AA27-500026
R309	DEL	1W 1K 2003-000537	1W 510 2003-001042
C452	1-5KV 472 2306-000326	1-5KV 772 2306-000330	1-5KV 742 2306-000295
RH01	DEL	R-C 1/2 4.7K 2002-001006	<----
RH01	R-C 1/2 4.7K 2002-001006	DEL	DEL
RH02	DEL	R-C 1/2 4.7K 2002-001006	<----
RH02	R-C 1/2 4.7K 2002-001006	DEL	DEL
J203	DEL	JUMPER	JUMPER
R257	2W 1 2008-000256	2W 0.47 2008-001018	<----
R518	2W 5.6 2008-000259	2W 1.2 2008-001013	<----
Y999	SOCKET-CRT 3704-000103	SOCKET-CRT 3704-001105	<----
R307	1/8 27K 2001-000563	<----	1/8 30K 2001-000633
C304	50V 1UF 2401-000553	<----	50V 0.47UF 2401-001333
R512	1/8 27 2001-000568	JUMPER	<----
R510	1/8 27 2001-000568	JUMPER	<----
R511	1/8 27 2001-000568	JUMPER	<----
R407	2W 300 2003-000644	2W 100 2003-000455	<----
R403	1/2 4.3K-F 2004-001387	1/2 4.7K-F 2004-001397	<----
R513	1/8 390 2001-000005	1/8 360 2001-000674	<----
R514	1/8 390 2001-000005	1/8 360 2001-000674	<----
R516	1/8 390 2001-000005	1/8 360 2001-000674	<----

OPTION PARTS

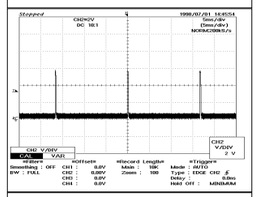
LOC	KOREA	NAIN	USA	JAPAN
RB11	1/2 B.2M 2002-001012	1/2 4.7M 2002-001013	<----	<----
CB54	400V/220UF 2411-003275	<----	200V/220UF 2401-003024	<----
RP801	7 OHM 1404-00104B	<----	DEL	DEL
RP8014	DEL	DEL	7 OHM 1404-000200	<----
FB01	250V 4A 3601-001012	<----	125V 4A 3601-000144	250V 4A 3601-001012
P-CORD	CP2/ND AA96-20009E	CP2/ND AA96-20051G	CP2/NES AA96-20129A	CP2/ND
TU01	107DP626A AA40-10005I	<----	<----	307DP526B AA40-10006E
CN601	14" - 3P1N 20" - 4P1N	3P1N	<----	<----
RB02	DEL	DEL	DEL	1/2 4.7M 2002-001013
LJ05	P1F AA26-10004C	<----	<----	P2F AA26-10005F
SF101	105SM 2904-000364	<----	<----	105SM 2904-000306
CB02	DEL	DEL	DEL	250V 224 2306-000318
CB15	DEL	C-C 104 2202-002037	<----	<----
RB11	DEL	1/8 470 2001-000780	<----	<----
RB01	DEL	1/2 1-2M 2002-001010	<----	<----
IC901	RJ451 AA13-30017M	R4195	R4195	RJ555 AA13-30018F
LB01	SMH AA29-30001D	<----	<----	SMH AA29-30001P
D-COIL	14" - AA27-20003V 20" - AA27-20023X 21" - AA27-20003Z	<----	14" - AA27-20004C 20" - AA27-20004B	<----
D402	DEL	DEL	1N4004 0402-000130	DEL
C403	DEL	DEL	50V/1UF 2401-000480	DEL
R405	DEL	DEL	1/8 22K 2001-000522	DEL
R404	DEL	DEL	1/2 11K-F 2004-001376	DEL
R403	DEL	DEL	1/2 4.3K-F	DEL
D401	DEL	DEL	RT2L-2B 0403-000297	DEL
G401	DEL	DEL	4545J9-Y 0501-000283	DEL
C402	DEL	DEL	50V/1UF 2401-000480	DEL
R401	DEL	DEL	1/8 22K 2001-000522	DEL
R408	DEL	DEL	1/8 51K 2001-000837	DEL
C401	DEL	DEL	C-C 103 2202-000127	DEL
IC901	3S0680F AA96-50395A	<----	3S0765MF AA96-50298D	<----

12-4-1 Waveform

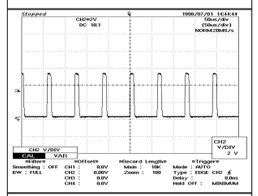
TP11



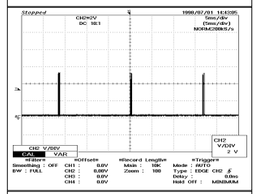
TP12



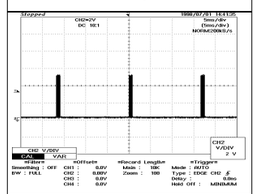
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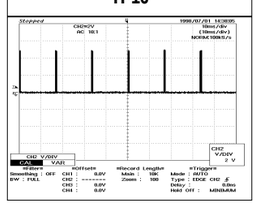
TP14



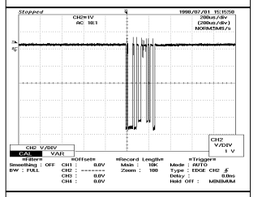
TP15



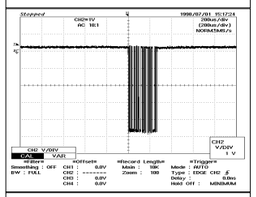
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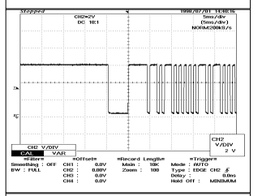
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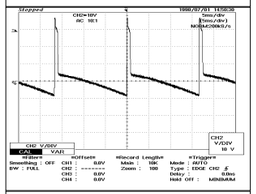
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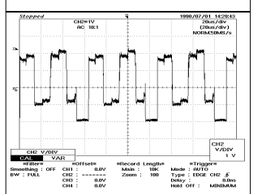
TP19



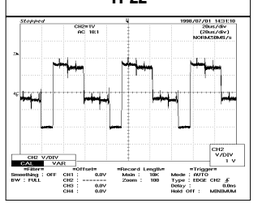
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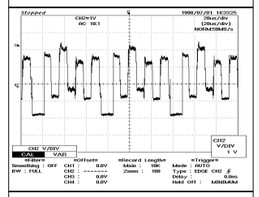
TP21



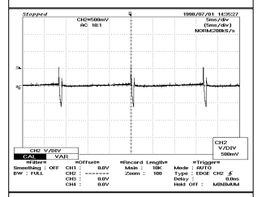
TP22



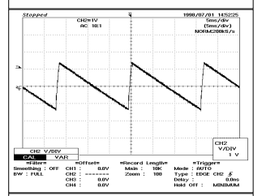
TP23



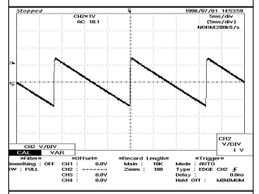
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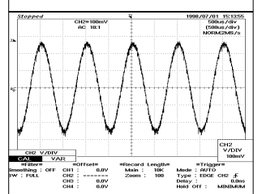
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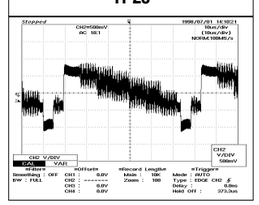
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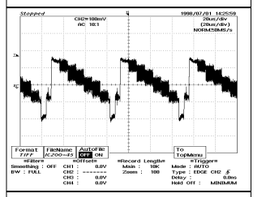
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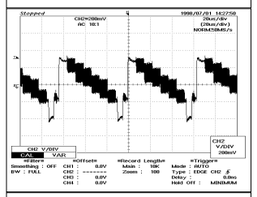
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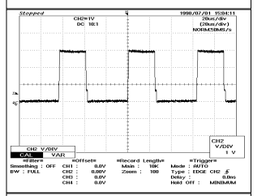
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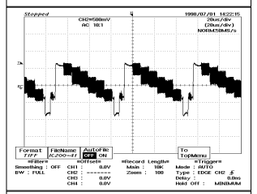
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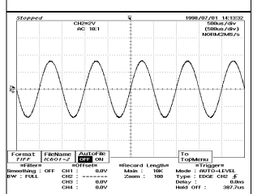
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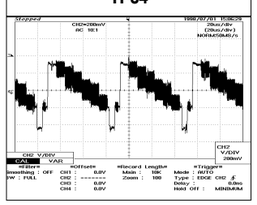
TP32



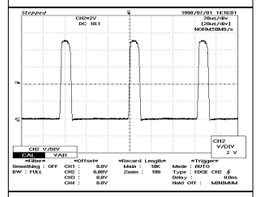
TP33



TP34



TP35



TP36

